

1. PURPOSE. This change transmits the following:

- a. Volume 1. General Concepts, Direction, Guidance, and Definitions
  - Chapter 1. Handbook Organization, Use, and Revision
    - Section 1. General Handbook Information
  - Chapter 4. General Direction, Guidance, and Procedures
    - Section 2. Compliance and Enforcement
    - Section 7. Emergency Actions Involving Air Carrier Operations
- b. Volume 2. Air Operator Certification
  - Chapter 3. Selected Practices
    - Section 4. Amendment, Surrender, Suspension, Revocation, and Replacement of Operating Certificates
    - Section 5. Hazardous Materials or Dangerous Goods
    - Section 6. International Civil Aviation Organization (ICAO) Company Designators and Radiotelephony Designators (Call Signs)
- c. Volume 3. Air Operator Technical Administration
  - Chapter 2. Training Programs and Airman Qualifications
    - Section 1. Scope, Concepts, and Definitions
    - Section 7. Flightcrew Qualification Curriculum Segments
  - Chapter 11. Operator Recordkeeping
    - Section 1. General
    - Section 2. Acceptance or Approval Process
    - Section 3. Currency Periods for Records
    - Section 4. Computer-Based Recordkeeping
- d. Volume 4. Aircraft Equipment and Operational Authorizations
  - Chapter 2. All-Weather Terminal Area Operations
    - Section 7. Lower-Than-Standard Takeoff Minimums

- Section 1. Selected Practices
- Chapter 7. Rotorcraft Authorizations and Limitations
  - Section 1. IFR Offshore Operations
  - Section 2. Helicopter En Route Descent Areas (HEDA's)
  - Section 3. Offshore Instrument Approach Procedures
- e. Volume 5. Airman Certification and Designated Examiners
  - Chapter 9. Selected Practices
    - Section 1. Re-Examination of Airmen under Section 609
    - Section 2. Amendments to Certificates and Replacement of Lost Certificates
    - Section 4. Pilot Logbooks
    - Section 5. Detection of Falsified or Altered Airman Certificates
    - Section 6. Renewal of Flight Instructor Certificates
    - Section 7. Special Medical Flight Tests
- f. Volume 6. Surveillance
  - Chapter 2. Specific Types of Inspections
    - Section 9. Crew and Dispatcher Records Inspections (PTRS Code 1627)
    - Section 11. Base Inspections (PTRS Code 1616)
    - Section 12. Observation of Air Carrier Operations from Air Traffic Control (ATC) Facilities (PTRS Code 1845)
    - Section 13. Inspection Procedures During Airline Strikes, Labor Unrest, Financial Stress (PTRS Code 1629)
    - Section 15. Line Check Inspections (PTRS Code 1633)
    - Section 16. Part 121 Pilot-In-Command (PIC) Operating Experience Observations (PTRS Codes 1356 and 1631)
    - Section 17. Training Program Inspections (PTRS Code 1626)
    - Section 18. Operational Control Inspections (PTRS Code 1636)



Chapter 1. Accident and Incident Investigation and Reporting

Section 1. Accident Investigations (PTRS Code 1702 or 1703)

Section 2. Incident Investigations (PTRS Code 1711 or 1712) and Occurrences (PTRS Code 1725)

h. Volume 8. General Technical Functions

Chapter 3. Technical Groups, Boards, and National Resources

Section 1. Background Information

Section 2. Aircraft Evaluation Groups (AEG's)

Section 3. Flight Operations Evaluation Boards (FOEB's)

Section 4. Flight Standardization Boards (FSB's)

Section 5. Maintenance Review Boards (MRB's)

i. Volume 9. Technical Staff Administration and Responsibilities

Chapter 1. General Inspector Responsibilities, Administration, and Conduct

Section 3. Aviation Safety Inspector (ASI) Credentials

2. CANCELLATION. When Change 7 is published, Order 8400.10 will be fully implemented, and the following orders will be cancelled:

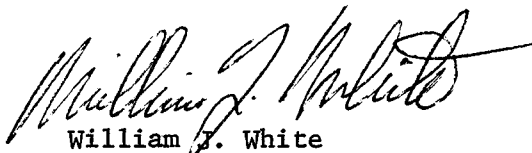
a. Order 8430.1D, Air Carrier Operations Inspector's Handbook - Part 135, dated August 17, 1984, is cancelled.

b. Order 8430.6C, Air Carrier Operations Inspector's Handbook, dated July 2, 1984, is cancelled.

3. DISPOSITION OF TRANSMITTAL. This transmittal is to be RETAINED AND FILED IN THE BACK OF THIS HANDBOOK until it is superseded by a new basic order.

Remove Pages	Dated	Insert Pages	Dated
Handbook Table of Contents, i thru viii	7/28/92	Handbook Table of Contents, i thru ix	9/30/92
Volume 1, i thru iv	6/30/91	Volume 1, i thru v	9/30/92
1-1 - 1-2 (thru 1-8)	6/30/91	1-1 - 1-2 (thru 1-8)	9/30/92
1-91 - 1-100 (thru 1-110)	8/23/88	1-91 (thru 1-100)	9/30/92
No page to remove		1-101 - 1-104 (thru 1-110)	9/30/92
No page to remove		1-151 (thru 1-158)	9/30/92
Volume 2, i thru vi	7/28/92	Volume 2, i thru vii	9/30/92
2-133 - 2-138 (thru 2-150)	8/23/88	2-133 - 2-139 (thru 2-140)	9/30/92
2-151 - 2-154 (thru 2-160)	7/28/92	2-141 - 2-159 (thru 2-160)	9/30/92
Volume 3, i thru xxiv	7/28/92	Volume 3, i thru xxv	9/30/92
3-117 - 3-156	8/23/88	No page to insert	
3-157 - 3-168 (thru 3-174)	6/16/89	3-157 - 3-170 (thru 3-174)	9/30/92
3-293 - 3-315 (thru 3-322)	8/31/90	3-293 - 3-314 (thru 3-322)	9/30/92
3-913 - 3-914 (thru 3-962)	8/23/88	3-913	8/23/88
3-963 - 3-980	8/23/88	3-914 (thru 3-950)	9/30/92
No page to remove		3-951 - 3-976 (thru 3-980)	9/30/92
Volume 4, i thru viii	7/28/92	Volume 4, i thru x	9/30/92

Remove Pages	Dated	Insert Pages	Dated
No page to remove		4-281 - 4-326 (thru 4-330)	9/30/92
4-459 (thru 4-560)	7/28/92	4-459 - 4-462 (thru 4-560)	9/30/92
No page to remove		4-869 - 4-961 (thru 4-966)	9/30/92
Volume 5, i thru ix	7/28/92	Volume 5, i thru x	9/30/92
No page to remove		5-441 - 5-673 (thru 5-684)	9/30/92
Volume 6, i thru iii	7/28/92	Volume 6, i thru vi	9/30/92
No page to remove		6-249 - 6-438 (thru 6-448)	9/30/92
No page to remove		Volume 7, i	9/30/92
No page to remove		7-1 - 7-14 (thru 7-26)	9/30/92
Volume 8, i	6/16/89	Volume 8, i thru iii	9/30/92
No page to remove		8-35 - 8-121 (thru 8-130)	9/30/92
No page to remove		Volume 9, i	9/30/92
No page to remove		9-1 - 9-51 (thru 9-58)	9/30/92



William J. White  
Deputy Director, Flight Standards Service



Section 2.	Provisions for Revision and Handbook Bulletins .....	1-9
Section 3.	Inspector Use of Handbook Material .....	1-17
Section 4.	Definitions (TBD)* .....	1-25
Section 5.	Acronyms and Abbreviations .....	1-35
Chapter 2.	THE FAA AND FLIGHT STANDARDS: HISTORY, ORGANIZATION, AND THE FEDERAL AVIATION ACT	
Section 1.	History and Organization of the Federal Aviation Administration .....	1-41
Section 2.	The Federal Aviation Act .....	1-57
Chapter 3.	INTERNATIONAL AVIATION	
Section 1.	The International Civil Aviation Organization .....	1-65
Section 2.	ICAO and the ICAO Annexes .....	1-68
Section 3.	ICAO Regional Plans and Aeronautical Information Publications .....	1-76
Chapter 4.	GENERAL DIRECTION, GUIDANCE, AND PROCEDURES	
Section 1.	Flight Standards Program and the Private Sector (TBD)* .....	1-91
Section 2.	Compliance and Enforcement .....	1-101
Section 3.	FAA Regulatory Responsibility and Methodology .....	1-111
Section 4.	Exemptions, Deviations, Waivers, and Authorizations .....	1-117
Section 5.	Custodians of Data Bases (TBD)* .....	1-129
Section 6.	The General Process for Approval or Acceptance .....	1-140
Section 7.	Emergency Actions Involving Air Carrier Operations .....	1-151

## VOLUME 2. AIR OPERATOR CERTIFICATION

Chapter 1.	GENERAL	
Section 1.	General Information .....	2-1
Section 2.	Types of Certificates and Applicable Rules .....	2-24
Section 3.	Assignment of Responsibilities for Part 121 and Part 135 Certificates and Certification Projects .....	2-36
Section 4.	Obtaining Certificate Numbers and Certificate Number Construction .....	2-44

\*(TBD)=TO BE DEVELOPED

Section 3.	Certification Phase .....	2-98
<b>Chapter 3. SELECTED PRACTICES</b>		
Section 1.	Air Carrier Mergers, Bankruptcies, and Acquisition of Air Carrier Assets .....	2-109
Section 2.	Single Pilot, Single Pilot-in-Command, and Basic Part 135 Operators .....	2-123
Section 3.	Operator Transitioning to a Different Regulatory Part (TBD)* .....	2-138
Section 4.	Amendment, Surrender, Suspension, Revocation, and Replacement of Operating Certificates .....	2-141
Section 5.	Hazardous Materials or Dangerous Goods .....	2-147
Section 6.	International Civil Aviation Organization (ICAO) Company Designators and Radiotelephony Designators (Call Signs) .....	2-157

**Chapter 4. FOREIGN AIR CARRIERS AND FOREIGN OPERATORS OF  
U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON CARRIAGE**

Section 1.	Background and FAA Authority .....	2-161
Section 2.	Operations Specifications .....	2-172
Section 3.	Compliance, Surveillance, and Enforcement .....	2-183
Section 4.	Leasing Agreements and Interchange Agreements .....	2-194
Section 5.	Maintenance and Minimum Equipment Lists for U.S.-Registered Aircraft .....	2-204
Section 6.	Special Purpose Flight Crewmember Certificates .....	2-210
Section 7.	Recordkeeping .....	2-217

**VOLUME 3. AIR OPERATOR TECHNICAL ADMINISTRATION**

**Chapter 1. OPERATIONS SPECIFICATIONS**

Section 1.	Background Information .....	3-1
Section 2.	Automated Operations Specifications .....	3-13
Section 3.	Operations Specifications Part A - General .....	3-38
Section 4.	Part B - En Route Authorizations and Limitations .....	3-64
Section 5.	Part C - Airplane Terminal Instrument Procedures and Airport Authorizations and Limitations .....	3-85
Section 6.	Part H - Helicopter Terminal Instrument Procedures and Airport Authorizations and Limitations .....	3-106
Section 7.	Amendment, Surrender, and Suspension of Operations Specifications .....	3-123

*\*(TBD)=TO BE DEVELOPED*

Section 4.	Flightcrew General Emergency Training Curriculum Segments	3-233
Section 5.	Flightcrew Aircraft Ground Training Curriculum Segments	3-253
Section 6.	Flight Training Curriculum Segments	3-293
Section 7.	Flightcrew Qualification Curriculum Segments	3-323
Section 8.	Special Curriculum Segments	3-331
Section 9.	Differences Training - All Training Categories	3-343
Section 10.	Flightcrew Recurrent Training Curriculums	3-353
Section 11.	Flightcrew Requalification Training Curriculums	

### Chapter 3. CHECK AIRMAN, INSTRUCTOR, AND SUPERVISOR PROGRAMS

Section 1.	General	3-365
Section 2.	Check Airman Approval Process	3-379
Section 3.	Check Airman and Air Transportation Flight Instructor Training	3-403

### Chapter 4. RESERVED (TBD)\*

### Chapter 5. AIRCRAFT DISPATCHER TRAINING AND QUALIFICATION PROGRAMS

Section 1.	Aircraft Dispatcher Training Curriculums	3-525
Section 2.	Aircraft Dispatcher Training Approval Process (TBD)*	3-537
Section 3.	Aircraft Dispatcher Basic Indoctrination Curriculum Segments	3-549
Section 4.	Aircraft Dispatcher Initial Equipment and Transition Ground Training Curriculum Segments	3-561
Section 5.	Aircraft Dispatcher Qualification Curriculum Segments and Recurrent and Requalification Curriculums	3-573

### Chapter 6. OPERATIONAL CONTROL

Section 1.	General Topics	3-585
Section 2.	Flight Dispatch Systems and Domestic Operating Rules	3-603
Section 3.	Part 121 Flight Release Systems and Supplemental Operating Rules	3-617
Section 4.	Part 121 Flag Operations, Supplemental Operations Outside the Contiguous States, and Extended Overwater Operations	3-629
Section 5.	Part 135 Flight-Locating Systems and Operating Rules	3-643

### Chapter 7. AVIATION WEATHER INFORMATION SYSTEMS

Section 1.	General Background Information	3-657
Section 2.	Parts 121/135 Weather Information Systems	3-666

\*(TBD)=TO BE DEVELOPED

Chapter 9. PROVING AND VALIDATION TESTS

Section 1.	Background .....	3-717
Section 2.	The Proving and Validation Test Process .....	3-724
Section 3.	Proving Test Requirements .....	3-729
Section 4.	Planning the Proving Test .....	3-738
Section 5.	Proving Tests: The Demonstration Phase .....	3-753
Section 6.	The Proving Test Report .....	3-763
Section 7.	Request for Deviation of Proving Test Hours .....	3-769
Section 8.	Validation Test Requirements .....	3-778

Chapter 10. EMERGENCY EVACUATION AND DITCHING DEMONSTRATIONS

Section 1.	General .....	3-843
Section 2.	The Aborted Takeoff Emergency Evacuation Demonstration .....	3-859
Section 3.	Aborted Takeoff Demonstration Procedures .....	3-868
Section 4.	Ditching Demonstrations .....	3-881
Section 5.	Evaluating Evacuation and Ditching Demonstrations .....	3-888
Section 6.	Reporting Evacuation Demonstrations .....	3-895
Section 7.	Maximum Passenger Seating Capacity for Airplanes Used in Part 121 Operations .....	3-902

Chapter 11. OPERATOR RECORDKEEPING

Section 1.	General .....	3-951
Section 2.	Acceptance or Approval Process .....	3-957
Section 3.	Currency Periods for Records .....	3-968
Section 4.	Computer-Based Recordkeeping .....	3-976

Chapter 12. ENVIRONMENTAL CONSIDERATIONS AND RESPONSIBILITIES

Section 1.	Background Information .....	3-981
Section 2.	Aircraft Noise .....	3-988
Section 3.	Environmental Assessments .....	3-998

Chapter 13. LEASE AND INTERCHANGE AGREEMENTS

Section 1.	General .....	3-1007
Section 2.	Dry Lease Agreements .....	3-1014
Section 3.	Wet Lease Agreements .....	3-1021
Section 4.	Interchange Agreements .....	3-1029

\*(TBD) = TO BE DEVELOPED



## Chapter 15. MANUALS, PROCEDURES, AND CHECKLISTS

Section 1.	Background and Definitions .....	3-2055
Section 2.	Approval and Acceptance of Manuals and Checklists .....	3-2069
Section 3.	General Operations Manuals (GOM's) .....	3-2081
Section 4.	Flight Manuals .....	3-2095
Section 5.	Aircraft Checklists .....	3-2109

## VOLUME 4. AIRCRAFT EQUIPMENT AND OPERATIONAL AUTHORIZATIONS

### Chapter 1. AIR NAVIGATION

Section 1.	General Navigation Concepts, Policies, and Guidance .....	4-1
Section 2.	Air Navigation Approval Process .....	4-22
Section 3.	Class I Navigation .....	4-32
Section 4.	Class II Navigation .....	4-43
Section 5.	Special Navigation Areas of Operation .....	4-54

### Chapter 2. ALL-WEATHER TERMINAL AREA OPERATIONS

Section 1.	Introduction to and Evolution of All-Weather Terminal Area Operations .....	4-121
Section 2.	General Concepts for All-Weather Terminal Area Approach Procedures .....	4-134
Section 3.	Factors Affecting All-Weather Terminal Area Operations .....	4-146
Section 4.	Category I Operations .....	4-173
Section 5.	Category II Operations .....	4-211
Section 6.	Category III Operations .....	4-241
Section 7.	Lower-Than-Standard Takeoff Minimums .....	4-281
Section 8.	MLS, GPS, and LORAN-C Systems (TBD)* .....	4-299
Section 9.	Authorization for the Use of Special Terminal Instrument Procedures .....	4-321

### Chapter 3. AIRPLANE PERFORMANCE AND AIRPORT DATA

Section 1.	Airplane Performance Computation Rules .....	4-331
Section 2.	Airplane Performance Rules .....	4-365
Section 3.	Approval of Performance Data Sections of CFM's .....	4-409
Section 4.	Airport Data Acquisition Systems .....	4-435
Section 5.	Selected Practices .....	4-459

\*(TBD)=TO BE DEVELOPED

Section 1.	Background and Definitions .....	4-759
Section 2.	Authorizations for Part 135 Air Ambulance Services .....	4-775
Section 3.	Air Ambulance Service Operational Procedures .....	4-789
Section 4.	Air Ambulance Service Training Programs .....	4-805

## Chapter 6. AIRPLANE AUTHORIZATIONS AND LIMITATIONS

Section 1.	Selected Practices .....	4-869
------------	--------------------------	-------

## Chapter 7. ROTORCRAFT AUTHORIZATIONS AND LIMITATIONS

Section 1.	IFR Offshore Operations .....	4-941
Section 2.	Helicopter En Route Descent Areas (HEDA's) .....	4-949
Section 3.	Offshore Instrument Approach Procedures .....	4-961

# VOLUME 5. AIRMAN CERTIFICATION AND DESIGNATED EXAMINERS

## Chapter 1. DIRECTION, GUIDANCE, AND PROCEDURES

Section 1.	General Information .....	5-1
Section 2.	Phases of Certification .....	5-7

## Chapter 2. AIRLINE TRANSPORT PILOT CERTIFICATES

Section 1.	Application Phase - Airplanes and Helicopters .....	5-37
Section 2.	Flight Test Events in Airplanes .....	5-52
Section 3.	Conduct of Flight Tests in Airplane Flight Simulators and Training Devices ...	5-70
Section 4.	Conduct of Flight Tests in an Airplane .....	5-88
Section 5.	Oral and Flight Test Events in Helicopters .....	5-98
Section 6.	Conduct of Flight Tests in a Helicopter .....	5-113
Section 7.	Documentation Phase - All Aircraft .....	5-121

## Chapter 3. FLIGHT ENGINEER CERTIFICATE AND CLASS RATINGS

Section 1.	Application Phase .....	5-133
Section 2.	Oral and Flight Tests .....	5-146
Section 3.	Documentation Phase .....	5-161

## Chapter 4. AIRCRAFT DISPATCHER CERTIFICATES

\*(TBD)=TO BE DEVELOPED

## Chapter 6. AIRCREW DESIGNATED EXAMINER (ADE) PROGRAM

Section 1. General .....	5-241
Section 2. ADE Program Management .....	5-255
Section 3. Aircrew Program Designees (APD's) .....	5-289

## Chapter 7. AIRCRAFT NAVIGATOR CERTIFICATES

Section 1. General .....	5-305
--------------------------	-------

## Chapter 8. SCHOOL DESIGNATED EXAMINER (SDE) PROGRAM (TBD)\* .....

5-319

## Chapter 9. SELECTED PRACTICES

Section 1. Re-Examination of Airmen Under Section 609 .....	5-441
Section 2. Amendments to Certificates and Replacement of Lost Certificates .....	5-465
Section 3. Reserved (TBD)* .....	5-485
Section 4. Pilot Logbooks .....	5-621
Section 5. Detection of Falsified or Altered Airman Certificates .....	5-633
Section 6. Renewal of Flight Instructor Certificates .....	5-647
Section 7. Special Medical Flight Tests .....	5-661
Section 8. U.S. Airman Certificates and Special Purpose Airman Certificates Issued on the Basis of a Foreign Airman Certificate .....	5-685
Section 9. International Crewmember Certificates .....	5-707

## VOLUME 6. SURVEILLANCE

### Chapter 1. GENERAL POLICIES AND PROCEDURES

Section 1. General .....	6-1
Section 2. Reporting on Surveillance .....	6-15

### Chapter 2. SPECIFIC TYPES OF INSPECTIONS

Section 1. General Inspection Practices and Procedures .....	6-127
Section 2. Ramp Inspections .....	6-137
Section 3. Cabin En Route Inspections .....	6-149
Section 4. Cockpit En Route Inspections .....	6-167

\*(TBD)=TO BE DEVELOPED

Section 11.	Base Inspections (PTRS Code 1616) .....	6-285
Section 12.	Observation of Air Carrier Operations from Air Traffic Control (ATC) Facilities (PTRS Code 1845) .....	6-299
Section 13.	Inspection Procedures During Airline Strikes, Labor Unrest, Financial Stress (PTRS Code 1629) .....	6-311
Section 14.	Reserved (TBD)* .....	6-325
Section 15.	Line Check Inspections (PTRS Code 1633) .....	6-347
Section 16.	Part 121 Pilot-In-Command (PIC) Operating Experience Observations (PTRS Codes 1356 and 1631) .....	6-359
Section 17.	Training Program Inspections (PTRS Code 1626) .....	6-371
Section 18.	Operational Control Inspections (PTRS Code 1636) .....	6-387
Section 19.	Station Facilities Inspections (PTRS Code 1635) .....	6-417
Section 20.	Trip Records Inspections (PTRS Code 1628) .....	6-435

## VOLUME 7. INVESTIGATIONS

### Chapter 1. ACCIDENT AND INCIDENT INVESTIGATION AND REPORTING

Section 1.	Accident Investigations (PTRS Code 1702 or 1703) .....	7-1
Section 2.	Incident Investigations (PTRS Code 1711 or 1712) .....	7-13

## VOLUME 8. GENERAL TECHNICAL FUNCTIONS

### Chapter 1. WASHINGTON HEADQUARTERS TECHNICAL FUNCTIONS (TBD)\* .... 8-1

### Chapter 2. REGIONAL TECHNICAL FUNCTIONS

Section 1.	Regional Flight Procedures Branches .....	8-25
Section 2.	Evaluation Staffs .....	8-35

### Chapter 3. TECHNICAL GROUPS, BOARDS, AND NATIONAL RESOURCES

Section 1.	Background Information .....	8-77
Section 2.	Aircraft Evaluation Groups (AEG's) .....	8-91
Section 3.	Flight Operations Evaluation Boards (FOEB's) .....	8-101
Section 4.	Flight Standardization Boards (FSB's) .....	8-111
Section 5.	Maintenance Review Boards (MRB's) .....	8-121

*\*(TBD)=TO BE DEVELOPED*

Section 2. Personal Conduct (TBD)* .....	9-23
Section 3. Aviation Safety Inspector (ASI) Credentials .....	9-45

**APPENDIX 1. [TO BE DEVELOPED]**

**APPENDIX 2. [TO BE DEVELOPED]**

**APPENDIX 3. HANDBOOK BULLETINS - FILING INSTRUCTIONS (1 page) ..... i**

*\*(TBD)=TO BE DEVELOPED*



1. Purpose . . . . .	1-1
3. Distribution . . . . .	1-1
5. Cancellation . . . . .	1-1
7. Background . . . . .	1-1
9. Standardization and Coordination . . . . .	1-1
11. Appendices . . . . .	1-2
13. Revisions . . . . .	1-2
15. Handbook Organization . . . . .	1-2
17. Directive and Guidance Information . . . . .	1-2
18.-22. Reserved . . . . .	1-2

## Section 2. PROVISIONS FOR REVISIONS AND SUPPLEMENTS

23. Handbook Revisions . . . . .	1-9
25. Handbook Bulletins . . . . .	1-10
26.-30. Reserved . . . . .	1-10

## Section 3. INSPECTOR USE OF THE HANDBOOK MATERIAL

31. Handbook Organization . . . . .	1-17
33. Appendices . . . . .	1-18
34.-36. Reserved . . . . .	1-19

## Section 4. DEFINITIONS (TBD)\*

37.-38. Reserved . . . . .	1-25
----------------------------	------

## Section 5. ACRONYMS AND ABBREVIATIONS

39. General . . . . .	1-35
40. Reserved . . . . .	1-37

\*(TBD) = *TO BE DEVELOPED*

41. Early Aviation Regulatory Authority and Responsibilities .....	1-41
43. Establishment of the FAA .....	1-41
45. Early Organizational Structures of the FAA .....	1-42
47. Current FAA Organizational Structure (1989) .....	1-42
49. History of Flight Standards .....	1-47
51. Current Organization of Flight Standards Service .....	1-47
53. Flight Standards Service Mission .....	1-50
55. Functional Organization Of Flight Standards Service .....	1-50
57. Goals of Flight Standards Service .....	1-51
58.-62. Reserved .....	1-52

## Section 2. THE FEDERAL AVIATION ACT

63. The Federal Aviation Act of 1958 .....	1-57
65. Evolution of Air Commerce Safety Regulation .....	1-57
67. Aviation Promotion and Regulation .....	1-57
69. The National Transportation Safety Board .....	1-57
71. Transfer of CAB Functions to DOT .....	1-58
73. Flight Standards Service and the FA Act .....	1-58
75. Private Sector Responsibilities .....	1-59
77. Air Carrier Responsibilities for Public Safety .....	1-59
78.-80. Reserved .....	1-60

## CHAPTER 3. INTERNATIONAL AVIATION

### Section 1. THE INTERNATIONAL CIVIL AVIATION ORGANIZATION

81. General .....	1-65
83. The Chicago Convention .....	1-65
85. United States Participation .....	1-65
86.-88. Reserved .....	1-65



95. ICAO Publications .....	1-69
97. Annexes to the Convention .....	1-70
98.-110. Reserved .....	1-71

### Section 3. ICAO REGIONAL PLANS AND AERONAUTICAL INFORMATION PUBLICATIONS

111. Regional Planning .....	1-76
113. Air Navigation Plans .....	1-76
115. Aeronautical Information Publications (AIP) .....	1-76
116.-120. Reserved .....	1-76

## CHAPTER 4. GENERAL DIRECTION, GUIDANCE, AND PROCEDURES

### Section 1. FLIGHT STANDARDS PROGRAM AND THE PRIVATE SECTOR (TBD)\*

121.-128. Reserved .....	1-91
--------------------------	------

### Section 2. COMPLIANCE AND ENFORCEMENT

129. General .....	1-101
131. Air Carrier Voluntary Disclosure of Violations .....	1-101
133. Deviations Resulting from Emergencies .....	1-103
135. Violations That Involve Multiple Crewmembers .....	1-103
137. System-Wide Violations .....	1-104
139. POI Notification and Action .....	1-104
140. Reserved .....	1-104

### Section 3. FAA REGULATORY RESPONSIBILITY AND METHODOLOGY

141. General .....	1-111
143. Regulatory Procedures .....	1-111

\*(TBD) = *TO BE DEVELOPED*

#### Section 4. EXEMPTIONS, DEVIATIONS, WAIVERS, AND AUTHORIZATIONS

155. Exemptions .....	1-117
157. Content of Petition .....	1-117
159. Preparation and Mailing of Petition .....	1-117
161. Processing the Petition .....	1-117
163. Distribution and Availability of Exemptions .....	1-117
165. Amendment of Operations Specifications .....	1-117
167. Petition for Reconsideration .....	1-117
169. Processing a Petition for Reconsideration .....	1-117
171. Deviations, Waivers, and Authorizations .....	1-118
173. Waivers and Authorizations .....	1-118
175. Deviations .....	1-122
177. Deviations for Military Contract Operations .....	1-122
179. Deviation to Perform an Emergency Operation .....	1-122
180.-184. Reserved .....	1-123

#### Section 5. CUSTODIANS OF DATA BASES (TBD)\*

185.-204. Reserved .....	1-129
--------------------------	-------

#### Section 6. THE GENERAL PROCESS FOR APPROVAL OR ACCEPTANCE

205. General .....	1-140
207. Phase One .....	1-140
209. Phase Two .....	1-141
211. Phase Three .....	1-141
213. Phase Four .....	1-142
215. Phase Five .....	1-142
217. Summary of Process .....	1-143
218.-222. Reserved .....	1-143

*\*(TBD) = TO BE DEVELOPED*





**1. PURPOSE.** This order is referred to as a handbook and directs the activities of operations aviation safety inspectors (ASI's) who are responsible for the certification, technical administration, and surveillance of air carriers and certain other air operators who conduct their operations in accordance with Parts 121 and 135 of the Federal Aviation Regulations (FAR's). It also contains regional and district office requirements for the support of ASI's responsible for those activities.

**3. DISTRIBUTION.** This order is distributed to all addressees on special distribution list ZFS 840.

**5. CANCELLATION.** When Change 7 is published, Order 8400.10 will be fully implemented, and the following orders will be cancelled:

A. Order 8430.1D, Air Carrier Operations Inspector's Handbook - Part 135, dated August 17, 1984, is cancelled.

B. Order 8430.6C, Air Carrier Operations Inspector's Handbook, dated July 2, 1984, is cancelled.

**7. BACKGROUND.** This handbook has been designed to serve as a multipurpose document that will meet the needs of new inspectors entering the Federal Aviation Administration's (FAA's) Flight Standards workforce, as well as those with many years of experience. Historical information regarding FAA's evolvement, and the latest material available covering current, state-of-the-art aircraft and equipment has been included. A wide variety of information, currently found in many separate documents, has been compiled to make this handbook as comprehensive as possible. When completed, the handbook will consist of nine volumes encompassing subjects from general concepts, direction, guidance, and procedures to very detailed explanations of such programs as automated operations specifications, air navigation, all-weather

terminal operations, and training programs.

**9. STANDARDIZATION AND COORDINATION.** A major objective of Flight Standards Service is to standardize the functions of the aviation safety inspector position. For this reason, any change to this handbook must be preceded by formal coordination between all flight standards divisions. The Technical Standards Branch (AFS-550) of the Field Programs Division is responsible for circulating draft material and for coordinating the reconciliation process.

A. *Regional Handbook Coordinators.* Each regional flight standards division manager shall designate a regional specialist to serve as the regional handbook coordinator. The regional handbook coordinator shall serve as an advisor to the regional division manager on the content of the handbook and represent the division manager in discussions with AFS-550 and the other regional handbook coordinators on the content of each proposed change. The regional handbook coordinator shall also act as an expert on the content of the handbook for the flight standards district offices (FSDO's).

B. *Direction and Guidance.* The direction and guidance in this handbook has been written using a "middle of the road" approach. A deliberate effort has been made to provide sufficient direction and guidance to standardize the job functions of the aviation safety inspector position without unnecessarily restricting the initiative of individual inspectors and managers. Should inspectors, supervisors, and managers find the direction and guidance of the handbook too restrictive or inappropriate for a specific case, a request should be made for permission to deviate from the guidance of the handbook. Such requests should be forwarded through the applicable flight standards division to AFS-500. When AFS-500 agrees to a deviation, the guidance in the handbook will be reviewed for possible revision.

C. *Authority to Change This Document.* The Director,

orders simultaneously. In such a case, the order with the most recent date should normally be used. Should the guidance in this order conflict with an FAR, the FAR takes precedence. Inspectors should refer questions about such conflicts to their immediate supervisors. Supervisors and managers may contact AFS-550 through the regional flight standards division handbook coordinator to resolve such questions.

E. *Distribution.* This handbook is available to both FAA personnel and to individuals outside the FAA.

(1) The handbook is distributed to FAA personnel through normal FAA publication distribution procedures. Any problems with distribution should be addressed to the regional distribution officer.

(2) Individuals outside the FAA may purchase a copy of this handbook from a Government Printing Office (GPO) outlet for \$37.00 (price may change without notice). The GPO stock number is SN 050-007-00923-2.

**11. APPENDICES.** The Operations Bulletins in Order 8430.17 will be incorporated as Appendix 1. As this material is reviewed during the development of the handbook, it will either be updated and included in the appropriate chapters, or canceled if no longer pertinent. When this process is complete, Order 8430.17 will be canceled. Appendix 2 is in the development phase and will be designed as a comprehensive cross-reference index that will identify major subjects to help locate specific information in the handbook. Appendix 3 is comprised of handbook bulletins (see section 2, paragraph 25 and section 3, paragraph 33C for more information).

**13. REVISIONS.** During the development of this handbook, individual chapters and sections will be published as they are completed and will become effective upon receipt.

easy to use. It is numbered sequentially by volumes, with each volume containing chapters and sections. Paragraphs in each volume are consecutive odd numbers. Even numbers have been reserved for expansion. Pages are numbered within each volume and are so identified (for example, page 25 of volume 3 is shown as 3-25).

B. Where material is only referenced by paragraph number, it can be assumed that the referenced paragraph is within the same volume. If reference is made to material in another volume, it will be identified by volume number, chapter, and section or paragraph number.

C. Figures and tables have been kept as close to the pertinent text as possible. Where they are lengthy, they have been placed at the back of the section so as not to create large breaks in the textual material. Figures and tables will be identified numerically by volume, chapter, section, and the figure or table number. For example, the first table in volume 1, chapter 2, section 3 will be identified as table 1.2.3.1 and the second table will be table 1.2.3.2.

## **17. DIRECTIVE AND GUIDANCE INFORMATION.**

A. Directive information is information that is considered directive in nature and will contain terms such as "shall," "must," and means the actions are mandatory. "Shall not" means the action is prohibited. The use of these terms will leave no flexibility and their direction shall be followed unless otherwise authorized by headquarters.

B. Guidance information is information considered guiding in nature and will contain terms such as "will," "should," or "may." These terms indicate actions that are desirable, permissive, or not mandatory, and allow flexibility.

**18. - 22. RESERVED.**

[PAGES 1-3 THROUGH 1-8 RESERVED]

**121. - 128. RESERVED.**

**[PAGES 1-92 THROUGH 1-100 RESERVED]**





and enforcement program pertaining to Part 121 and Part 135 operators. These subject areas include the following:

- Air carrier voluntary disclosure of violations
- Deviations resulting from emergencies
- Violations involving multiple crewmembers
- System-wide violations

**NOTE:** Section 601(B) of the Federal Aviation Act requires that air carriers perform their services with the highest possible degree of safety in the public interest.

**131. AIR CARRIER VOLUNTARY DISCLOSURE OF VIOLATIONS.** AC 120-56, "Air Carrier Voluntary Disclosure Reporting Procedures" contains detailed information and guidance that may be used by Part 121 and Part 135 operators when electing to voluntarily disclose violations to the FAA. The sharing of violation information, a cooperative attitude between operators and the FAA and an advisory approach to solving problems, enhance and promote aviation safety. The inspector should, therefore, inform an operator that if the operator chooses to comply with the guidance in this section, the operator will be issued a letter of correction in lieu of civil penalty action.

*A. Eligibility of Operator.* When an inspector evaluates the eligibility of an operator for using voluntary disclosure procedures, the inspector should ensure that the operator meets the following five conditions:

(1) The operator immediately notified the FAA of the apparent violation after detecting it and before the agency learned of it.

(4) Immediate action must have been taken, or begun to have been taken, upon discovery to terminate the conduct that resulted in the apparent violation.

(5) The operator must develop and implement a comprehensive fix satisfactory to the FAA.

**NOTE:** Ordinarily, the FAA will not forego legal enforcement action if the operator informs the FAA of the apparent violation during routine FAA investigations/inspections (that time from which the inspection team physically arrives on site until the time the team departs at the completion of the inspection), or in association with accidents and incidents.

*B. Procedures.* Inspectors should use the following procedures when applying the voluntary disclosure policy:

(1) *Initial Notification By the Operator.* The operator shall initially notify the appropriate principal inspector immediately after discovering the violation. This notification may be verbal, in written hard copy, or in written electronic copy. It is more important for the initial notification to be immediate than complete. The operator should not delay this notification just to gather information. Time permitting, this initial notification should cover, with as much detail as is available, at least the following items:

- A brief description of the apparent violation (to include an estimate of the duration of time that the apparent violation remained undetected as well as how and when it was discovered)
- Verification by the operator that additional similar violations have not occurred after the initial violation was identified

the apparent violation points to any system-wide problems

- A description of the corrective steps necessary to prevent the apparent violation from recurring
- Identification of the person responsible for preparing the comprehensive fix
- Acknowledgement from the operator that a detailed written report will be provided to the principal inspector within 10 calendar days after the discovery of the apparent violation

(2) *FAA Response to Operator Notification.* The principal inspector shall respond to the operator with a written acknowledgement of the initial notification. This response serves in lieu of a letter of investigation, provided the written report is completed according to the procedures set forth in AC 120-56. These procedures are summarized in subparagraph (3).

(3) *Operator's Written Report.* Upon receipt of the operator's written report, the inspector should ensure that the written report contains the following:

- A specific list of the FAR's violated
- A description of the apparent violation (to include the duration of time it remained undetected as well as how and when it was detected)
- A description of the immediate action taken to terminate the conduct that resulted in the apparent violation (to include when the action was taken and who was responsible for taking the action)

comprehensive fix (to include the planned corrective steps (such as organization, procedures, manuals, and facilities), the responsibilities for implementing those corrective steps, and a time schedule for completion of the fix)

- Identification of the company official responsible for monitoring the implementation and completion of the comprehensive fix

(4) *Review of Comprehensive Fix.* The inspector shall work with the operator to review the comprehensive fix to ensure that it will prevent a recurrence of the violation.

(a) *Complete Fix.* When the proposed fix is found to be acceptable, the principal inspector shall prepare a letter of correction that includes the date when the fix will be implemented and the date when the fix will be completed.

(b) *Incomplete Fix.* If the proposed comprehensive fix cannot be fully developed within 10 calendar days, the operator should provide at least an overview of its plan. In any event, the operator shall provide a detailed description of the comprehensive fix to the principal inspector within 30 calendar days after the operator's initial notification of the apparent violation.

(5) *Implementation of the Comprehensive Fix.* During the implementation period, the principal inspector and the operator should continue to work together. The principal inspector has the latitude to advise and assist the operator in correcting any identified problems. Changes can be made to the comprehensive fix when a need is identified. When a change to a comprehensive fix has been agreed upon, the principal inspector shall prepare an amended letter of correction that reflects the change and that contains a plan for monitoring the implementation of the corrective steps.

assessment. If all elements of the comprehensive fix have been adequately accomplished, the principal inspector shall prepare a letter confirming that the comprehensive fix was satisfactorily implemented and completed. This letter shall be sent to the operator and used to close the investigation package.

(7) *Informal Appeal Process.* When disagreements occur regarding either the acceptance of a proposed comprehensive fix or changes to a comprehensive fix prior to its classification as satisfactory, the principal inspector and the operator may request that the issue be resolved at the next level of management within the FAA. This procedure provides for an independent assessment of the areas in disagreement.

(8) *Closing the Case.* The principal inspector has the authority to close the case, however, it may be appropriate for the inspector to consult other inspectors, regional specialists, or the Assistant Chief Counsel on when the case should be closed. After the letter of correction has been issued, the case is closed but will remain subject to a re-opening in the event that the agreed upon actions covered in the comprehensive fix have not been completed to the satisfaction of the FAA.

(9) *Subsequent Violations.* If the same or similar violations are discovered subsequent to the FAA's completion of an investigation package, the FAA will not re-open the case unless it is determined that the operator failed to comply with all elements of the comprehensive fix. Additionally, if an operator decides to make further changes to programs or systems identified in a comprehensive fix once it becomes classified as satisfactory, the additional changes do not have to receive separate FAA approval under the terms of this disclosure policy.

(10) *Separate Actions Against Airmen or Other Employees.* The voluntary disclosure policy applies to individual certified airmen or other employees of an

operator.

(c) The employing operator must notify the FAA of the apparent violation immediately after the employee has reported it to the operator.

**NOTE: If all the preceding conditions are not met, the principal inspector shall review all facts associated with the case and determine what action is appropriate.**

### **133. DEVIATIONS RESULTING FROM EMERGENCIES.**

FAR 135.19(c), FAR 121.557(c), and FAR 121.559(c) require that notification be sent to the FAA Administrator concerning any deviation an operator has made from the FAR's as a result of an emergency. Each report of an emergency deviation from the FAR's that involves an air carrier shall be investigated to determine if corrective action is necessary. A shared responsibility exists between Flight Standards Service (FSS) and operators. Operators and crewmembers shall not be permitted to use the emergency provisions of the FAR's as an excuse for failing to comply with a regulation. On the other hand, inspectors must be cautious and ensure that an atmosphere does not develop in which a crewmember would hesitate to declare an emergency for fear of being unfairly criticized after the aircraft is safely on the ground. The investigation should include a determination as to whether the operator and crew were in compliance with such items as operations specifications (OpSpecs), company procedures, and checklists. If a determination is made that the operator and crew performed properly, an enforcement action should not be initiated as a result of the deviation. If the emergency was caused by the operator's or airman's incompetence or disregard for a specific FAR, the inspector should follow the guidance provided in FAA Order 2150.3A, "Compliance and Enforcement Program."

**135. VIOLATIONS THAT INVOLVE MULTIPLE CREWMEMBERS.** If crewmembers are charged as a result of violations involving operations of aircraft requiring multiple

each crewmember suspected of being in violation of the FAR's.

**137. SYSTEM-WIDE VIOLATIONS.** System-wide violations involve multiple occurrences of the same violation by one or more operators. Inspectors should be aware that if multiple violations of the same regulation are occurring either by the same operator or by more than one operator, a misunderstanding of the regulation may be the cause rather than a deficiency in the operator's system. If an inspector's investigation reveals that non-compliance involves more than one operator and that it is due to a misunderstanding of the FAR, the inspector should provide the operators with the correct interpretation of the rule. After providing the correct interpretation of the rule,

inspector's opinion, may indicate widespread non-compliance with the FAR's or operator procedures (Such occurrences may be brought to the inspector's attention during the initial investigation.)

**139. POI NOTIFICATION AND ACTION.** When an inspector initiates a violation investigation, the inspector should immediately notify the POI of the impending action. This will allow the POI to determine the extent of the problem and to ensure that the operator takes corrective action. Additional coordination between the inspector and the POI may be necessary to determine who handles the enforcement action, in accordance with the guidance in Order 2150.3A.

**140. RESERVED.**

[PAGES 1-105 THROUGH 1-110 RESERVED]

Federal Aviation Act of 1958. The authorization for an emergency amendment to operations specifications is contained in FAR 121.79 and FAR 135.17. This section contains direction and guidance to be used by inspectors when handling such emergencies for Part 121 and Part 135 operations.

**225. NOTIFICATION PROCEDURES.** When an inspector becomes aware of an emergency which adversely affects public safety, the inspector shall use the following procedures:

*A. Emergency Occurring During Regular Working Hours.* During regular working hours, inspectors shall immediately notify the regional flight standards division (RFSD) through their supervisor of the emergency need for exemption or amendment to the operations specifications (OpSpecs). The RFSD is responsible for then deciding

ional Communication Center cannot reach personnel of the RFSD, the inspector should request that the Regional Communication Center immediately connect the inspector with AFS-500 through the Washington Headquarters Communication Center.

**NOTE:** Specific guidance on emergency situations of this type will be given verbally by telephone through the Command Center. A written follow-up to the verbal guidance will be sent out on FAA Telemail system in the form of either a handbook bulletin or a flight standards information bulletin (FSIB).

**227. ADDITIONAL GUIDANCE.** For additional procedures and information on the internal FAA communications and emergency operations responsibilities, inspectors should refer to FAA Order 1900.1D, "FAA Emergency Operations Plan."

**228. - 238. RESERVED.**

**[PAGES 1-152 THROUGH 1-158 RESERVED]**



1. Purpose .....	2-1
3. The Certification Process .....	2-1
5. Chapter 3, Selected Practices .....	2-2
7. Chapter 4, Foreign Air Carriers .....	2-2
8.-12. Reserved .....	2-2

## Section 2. TYPES OF CERTIFICATES AND APPLICABLE RULES

13. Types of Certificates .....	2-24
15. Common Carriage vs. Private Carriage .....	2-25
17. Air Transportation and Air Carriers .....	2-25
19. Economic Authority-DOT Certificates and Exemptions .....	2-25
21. Regulatory Requirements .....	2-27
22.-26. Reserved .....	2-28

## Section 3. ASSIGNMENT OF RESPONSIBILITIES FOR PART 121 AND PART 135 CERTIFICATES AND CERTIFICATION PROJECTS

27. General .....	2-36
29. Principal Base of Operations .....	2-36
31. Factors to be Considered When Designating a Principal Base of Operations .....	2-36
33. Split Main Operations and Main Maintenance Base Locations .....	2-36
35. Regional Coordination for the Assignment or Reassignment of Certificate Holding Responsibilities .....	2-37
36.-40. Reserved .....	2-38

## Section 4. OBTAINING CERTIFICATE NUMBERS AND CERTIFICATE NUMBER CONSTRUCTION

41. Obtaining Precertification Numbers and Final Certificate Numbers .....	2-44
43. Certificate Number Construction .....	2-44

## CHAPTER 2. THE CERTIFICATION PROCESS PART 121 AND PART 135

### Section 1. PREAPPLICATION PHASE

55. General .....	2-53
57. Initial Inquiries or Requests .....	2-53
59. Preapplication Statement of Intent (PASI) FAA Form 8400-62-54	
61. District Office Review of PASI .....	2-54
63. Regional Office Actions With the PASI .....	2-54
65. Assignment of Certification Team .....	2-54
67. Responsibilities of CPM and the Certification Team .....	2-55
69. Preapplication Meeting .....	2-55
71. Instructions to the Applicant on the Formal Application .....	2-56
73. Formal Application Attachments .....	2-56
75. Conclusion of Preapplication Meeting .....	2-59
77. Termination of the Preapplication Process .....	2-59
78.-82. Reserved .....	2-59

### Section 2. FORMAL APPLICATION PHASE

83. Receipt of Formal Application .....	2-73
85. Initial Review of the Formal Application .....	2-73
87. Schedule of Events Attachment .....	2-73
89. Company General Manual Attachments .....	2-74
91. Initial Company Training Curriculum Attachments .....	2-74
93. Management Qualifications Attachments (Resumes) .....	2-74
95. Documents of Purchase, Contracts, Leases, and Letters of Intent Attachment .....	2-74
97. Initial Compliance Statement Attachment .....	2-74
99. Initial Determination of Formal Application Acceptability .....	2-74
101. The Formal Application Meeting .....	2-75
103. Final Determination of Formal Application Acceptability .....	2-76



111. General .....	2-85
113. Planning the Document Compliance Phase .....	2-85
115. Review of Applicant's Submissions .....	2-85
117. The Final Compliance Statement .....	2-86
119. Document Deficiencies .....	2-86
120.-124. Reserved .....	2-86

#### Section 4. DEMONSTRATION AND INSPECTION PHASE

125. General .....	2-92
127. Observations and Monitoring of Events .....	2-92
129. Demonstration and Inspection Deficiencies .....	2-92
130.-134. Reserved .....	2-92

#### Section 5. CERTIFICATION PHASE

135. General .....	2-98
137. Preparation of FAA Certificates .....	2-98
139. Issuance of Operations Specifications and Certificate .....	2-99
141. Certification Report .....	2-99
143. Certification Report Distribution .....	2-99
144.-148. Reserved .....	2-99

### CHAPTER 3. SELECTED PRACTICES

#### Section 1. AIR CARRIER MERGERS, BANKRUPTCIES, AND ACQUISITION OF AIR CARRIER OPERATIONAL ASSETS

149. General .....	2-109
151. The Process for Handling Bankruptcies, Mergers, and Acquisitions .....	2-110
153. Phase One .....	2-110
155. Phase Two .....	2-112

165. General .....	2-123
167. Definitions .....	2-123
169. Certification Process .....	2-123
171. Special Airworthiness Considerations .....	2-123
173. Certification Process Differences for Single Pilot and Single Pilot-in-Command Operators .....	2-123
175. Concept of a Basic Part 135 Operator .....	2-125
177. Deviations for Basic Part 135 Operators .....	2-125
179. Delegation of Authority to Approve Deviations .....	2-125
181. Limitation of Authority to Approve Deviations .....	2-126
183. Certification Process Differences for Basic Part 135 Operators .....	2-126
184.-200. Reserved .....	2-127
 Section 3. OPERATOR TRANSITIONING TO A DIFFERENT REGULATORY PART	
201.-202. Reserved .....	2-139
 Section 4. AMENDMENT, SURRENDER, SUSPENSION, REVOCATION, AND REPLACEMENT OF OPERATING CERTIFICATES	
203. General .....	2-141
205. Amendment of a Certificate .....	2-141
207. Surrender of a Certificate .....	2-143
209. Suspension of a Certificate .....	2-143
211. Revocation of a Certificate .....	2-143
213. Replacement of a Lost or Destroyed Certificate .....	2-144
215. Adverse Actions .....	2-144
216. Reserved .....	2-144

221. Responsibility for Approval, Surveillance, and Enforcement of Hazardous Materials or Dangerous Goods Programs .....	2-147
223. Procedures for Approval of Hazardous Materials or Dangerous Goods Training Programs .....	2-147
225. Procedures for Acceptance of Hazardous Materials or Dangerous Goods Manuals .....	2-148
227. Required Hazardous Materials or Dangerous Goods Information .....	2-148
229. Coordination .....	2-149
231. Exemptions .....	2-149
233. Violations and Investigations .....	2-150
235. Sources of Information .....	2-150
236. Reserved .....	2-151

#### Section 6. INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) COMPANY DESIGNATORS AND RADIOTELEPHONY DESIGNATORS (CALL SIGNS)

237. General .....	2-157
239. Applicability .....	2-158
241. Procedures for Assignment of Designators .....	2-158
243. Effective Date and Publication .....	2-158
245. Changes in Company Status and Cancellation .....	2-159
247. Other Information Sources .....	2-159
248.-254. Reserved .....	2-159

### CHAPTER 4. FOREIGN AIR CARRIERS AND FOREIGN OPERATORS OF U.S.-REGISTERED AIRCRAFT ENGAGED IN COMMON CARRIAGE

#### Section 1. BACKGROUND AND FAA AUTHORITY

255. The Chicago Convention and ICAO .....	2-161
257. Articles of the Convention .....	2-161
259. International Standards and Recommended Practices .....	2-161

271. Consumer Questions .....	2-162
272.-276. Reserved .....	2-163

## Section 2. OPERATIONS SPECIFICATIONS

277. General .....	2-172
279. Responsible FAA Field Office .....	2-172
281. Application .....	2-172
283. Processing Applications .....	2-172
285. Issuance of Operations Specifications .....	2-173
287. Amendments .....	2-173
288.-292. Reserved .....	2-173

## Section 3. COMPLIANCE, SURVEILLANCE, AND ENFORCEMENT

293. General .....	2-183
295. Compliance .....	2-183
297. Surveillance .....	2-183
299. Safety Enforcement .....	2-184
301. Accident, Incident, Near Mid-Air, and Complaint Investigation .....	2-185
302.-306. Reserved .....	2-185

## Section 4. LEASING AGREEMENTS AND INTERCHANGE ARRANGEMENTS

307. General .....	2-194
309. Wet Lease .....	2-194
311. Dry Lease .....	2-194
313. Interchange Agreement .....	2-194
314.-318. Reserved .....	2-195

322.-326. Reserved .....	2-204
--------------------------	-------

## Section 6. SPECIAL PURPOSE FLIGHT CREWMEMBER CERTIFICATES

327. Applicability .....	2-210
329. Forms, Issuance, and Disposition .....	2-210
331. Termination of Special Purpose Flight Crewmember Certificates .....	2-210
333. Surrender of Special Purpose Flight Crewmember Certificates .....	2-210
334.-338. Reserved .....	2-210

## Section 7. RECORDKEEPING

339. General .....	2-217
341. Foreign Air Carrier With FAA Issued Part 129 Operations Specifications .....	2-217
343. Foreign Person Operating A U.S.-Registered Aircraft Outside the United States ..	2-217
344.-352. Reserved .....	2-217



passenger seats is used.

- (6) No Category II or III instrument approach operations are conducted.
- (7) No operations are conducted outside the United States, Canada, Mexico, and the Caribbean.

#





**201. - 202. RESERVED.**

**[PAGE 2-140 RESERVED]**



A. *Background.* The basis for these various certificate actions is found in section 609 of the Federal Aviation Act (FA Act) and in FAR's 13.19, 121.29, 121.53, 121.77, 135.9, and 135.15. These certificate actions may be initiated by either the FAA or the operator. These actions can proceed with a full agreement between the POI and the operator or they may be contested.

**NOTE:** The term "operator" is used in this section to refer to the holder of either an air carrier certificate or an operating certificate (see volume 2, chapter 1, section 2).

B. *Definitions.* Inspectors should have an understanding of the distinctions between the various certificate actions that can occur. Inspectors should also have a knowledge of the following general definitions:

- *Certificate:* A certificate is a document that contains the name of the operator, a broad statement of the operator's operating authority, and an effective date. An operator may not conduct operations without a currently valid certificate.
- *Amendment of a Certificate:* The amendment of a certificate is a change to the information on the face of the document, usually as the result of a name change or administrative change. Certificates rarely require amendment because the details of operating authorizations are contained in the operations specifications.
- *Surrender of a Certificate:* The surrender of a certificate occurs when an operator voluntarily gives up operating authority.
- *Suspension of a Certificate:* The suspension of a

- *Revocation of a Certificate:* The revocation of a certificate is the permanent, involuntary removal of an operator's operating authority by the FAA using due process of law.
- *Replacement of a Certificate:* The replacement of a certificate is the reissuance of a new certificate to an operator when the operator's original certificate has either been lost or destroyed.

**205. AMENDMENT OF A CERTIFICATE.** An operator's certificate must be amended whenever there is a change in the information on the face of the document. For example, the amendment of a certificate is required when there is a change in the legal name of the owner or an administrative change.

A. *Administrative Change to a Certificate.* An administrative change to a certificate may be required because of an error in the preparation of a certificate or because a piece of information on the certificate has become outdated. When an administrative change is made to a certificate, the original certificate number and date are retained. An administrative change to a certificate does not interrupt the operator's authority to conduct operations. Some events which necessitate an administrative change to an operator's certificate are as follows:

- A change in the address of the operator's principal base of operations
- A change to correct a mistake
- A change in the certificate-holding district office (CHDO)
- A change in name of the FAA or a change in the FA Act

ownership change, documentation is required. The POI must determine what these requirements are and discuss the requirement with the operator. A clear understanding at this stage of the process precludes difficulties from arising later.

(1) FAR 121.77 and FAR 135.15 require that an operator desiring an amendment submit an application for amendment to the CHDO at least 15 working days before the requested effective date. The application consists of a letter of request and any required documentation.

(2) The POI shall conduct a preliminary review of the application for completeness and general acceptability. The entire review process may be little more than a formality. In such cases, the POI may issue the certificate immediately upon completion of the review. In other cases, the full review process can require detailed analysis. When the full review cannot be completed within 10 days, the POI shall notify the operator of the estimated time that will be required. In the case of an administrative change, the POI should reissue the certificate with the original effective date, certificate number, and an added amended date.

(3) When the operator submits incomplete documentation, the POI shall promptly inform the operator that action cannot proceed until the deficiency is corrected. Usually these deficiencies will be overcome in the normal process of events. Should the operator's proposal be unacceptable or should the operator fail to proceed, the POI shall notify the operator in writing that the proposal has been denied. The letter must include a clear statement of why the proposal has been denied.

(4) FAR 121.77(c) and FAR 135.15(d) state that those operators that have received a denial to an application for amendment may petition the Director of Flight Standards Services (AFS-1) for a reconsideration. The petition must be made within 30 days of the operator's

is a change in ownership or operator name. When the POI is ready to prepare the new certificate, the POI must contact AVN-120. The POI should give an explanation of the changes to AVN-120 and request a new certificate number. In most cases, the designator element of the certificate number will remain the same. The type certificate code and the numeric or alpha suffix element should be appropriately changed to form the new certificate number (see volume 2, chapter 1, section 4).

(6) An amended certificate shall be prepared with the new certificate number and a new effective date. The amended certificate shall be exchanged for the superseded certificate. The operator's Vital Information System (VIS) file should be updated to reflect any new information that may be on the certificate.

C. *FAA-Initiated Amendment.* On rare occasion, it is necessary for the FAA to make an amendment to an operator's certificate. In this case the POI shall contact the operator and explain the circumstances. The POI shall prepare the amended certificate and have the operator exchange its current certificate for the amended one.

**NOTE: One circumstance which has caused difficulty is a change in CHDO. The FAA may decide to change the CHDO without the operator's concurrence. Should this situation arise, the POI should explain to the operator that, since such a change is an internal FAA matter, it does not constitute an amendment of the operator's certificate. In this case, the POI should make the change and issue the changed certificate to the operator. The operator may not appeal this type of action.**

D. *Re-Examination.* A change in ownership or other significant event requires an evaluation by the POI to determine whether the operator remains properly and adequately equipped and able to conduct safe operations. The evaluation process may or may not lead to a complete re-examination. When a substantial change in an operation

- A substantial change in management personnel
- A substantial change in flightcrew personnel
- Signs of significant financial stress
- The addition of a new type or make model aircraft to the operator's fleet
- A change in the base of operations
- A change in the operations conducted, such as Part 135 to Part 121
- A cessation of operations in excess of 30 days (This is not meant to include seasonal operators or on-demand operators for whom a 30-day lapse is a normal condition of business.)

(2) POI's should be aware that problems requiring a formal re-examination do not always occur immediately after a change in name or ownership occurs. When a change in name or ownership occurs, the POI shall request a letter from the operator that contains details of the changes in operations that are planned for a period of at least 6 months. These changes will be evaluated by the POI to determine the need for a formal re-examination. The POI may find later that, in spite of an operator's intention, other changes have occurred and a recertification may then be required.

**207. SURRENDER OF A CERTIFICATE.** POI's may request, but may not compel operators to voluntarily surrender, certificates. An operator may voluntarily surrender a certificate at any time. To do so, the operator should send the certificate to the POI with a written request that the certificate be cancelled and a statement of why the certificate is being surrendered. The request must

**A. Reinstatement of Voluntarily Surrendered Certificate.** A voluntarily surrendered certificate may not be reinstated. If the operator subsequently decides to reinstate operations, the operator must apply and qualify for a new certificate.

**B. Surrendering an Operating Certificate in Lieu of an Enforcement Action.** Operators may propose surrendering an operating certificate in lieu of enforcement action. POI's should not agree to such an action without the concurrence of the RFSD and Regional Counsel. Should such an agreement be reached, the operator's letter of request must contain a statement that the certificate is being surrendered on the basis that enforcement action will not be taken. When a certificate is surrendered, the POI shall enter a brief statement of the circumstances surrounding the voluntary surrender of the certificate in the "Remarks" section of the operator's VIS file.

**209. SUSPENSION OF A CERTIFICATE.** When a certificate is suspended, the Regional Counsel office will issue the operator a letter of suspension containing instructions with which the operator must comply. In general, the regional counsel will request that the operator's certificate be forwarded to the regional office, where it will be held until the end of the suspension period. Information concerning the disposition of a suspended certificate can be found in Order 2150.3A. When a certificate has been suspended, the operator's VIS file should be amended to reflect the suspended status.

**211. REVOCATION OF A CERTIFICATE.** Operators must forward revoked certificates to the address contained in the order revoking the certificate. Additionally, the operator's VIS file should be amended to show that the certificate has been revoked and should contain a statement of the reasons for the action in the "Remarks" section. Should revocation be appropriate, the POI should contact the operator and request that the operator voluntarily surrender the certificate. Should the operator refuse, the

should be retained in the CHDO's files. In the case of a destroyed certificate, the operator should send any remains of the certificate to the POI with a written request that the certificate be replaced and a statement of why the certificate is being surrendered. The request must be signed by the operator or an agent for service authorized to act for the operator.

**215. ADVERSE ACTIONS.** According to FAR 13.19(b), the FAA may find it necessary to amend, suspend, or revoke a certificate without the operator's concurrence. An adverse action of this nature should be initiated by the POI only after an unsuccessful attempt has been made to negotiate with the operator concerning the voluntary amendment or surrendering of the certificate. When an

A. *Emergency Revocation.* FAR 13.19 provides for the operator to have a hearing before the order which amends, suspends, or revokes the certificate can take effect. Should an emergency exist, however, the order which amends, suspends, or revokes the certificate may be made effective immediately.

B. *Appeals.* The operator may appeal an order amending, suspending, or revoking its certificate to the National Transportation Safety Board (NTSB). Should the operator elect to appeal a certificate action to the NTSB, the effective date of the order is stayed until the NTSB acts on the appeal, unless it is an emergency order.

**216. RESERVED.**

[PAGES 2-145 THROUGH 2-146 RESERVED]

121 and Part 135 operators are required to provide training on the identification of hazardous materials or dangerous goods to their personnel. Those operators who transport hazardous materials must include procedures for handling these materials in their general operations manuals (GOM's). These operators must also train their personnel in the use of these procedures.

**NOTE: Operators that choose not to carry hazardous materials or dangerous goods must have a hazardous materials or dangerous goods recognition program.**

#### **219. HAZARDOUS MATERIAL INFORMATION REQUIREMENTS FOR OPERATORS NOT ACCEPTING HAZARDOUS MATERIALS OR DANGEROUS GOODS.**

Operators who do not accept, handle, or store hazardous materials or dangerous goods must provide procedures and instructions in the operator's manual as follows:

- Procedures and information to ensure that all personnel responsible for accepting and handling any cargo or packaged materials receive adequate training on the recognition of items classified as hazardous materials or dangerous goods (Adequate is defined "operationally" as the demonstrated ability of required personnel to identify such items.)
- Procedures and instructions to ensure that no packages are accepted by the operator that contain a hazardous material
- Procedures and instructions for reporting that damaged packages found to contain, or that are suspected of containing, hazardous materials or dangerous goods are reported (in compliance with FAR 175.45, "Reporting Hazardous Materials Incidents")

#### **221. RESPONSIBILITY FOR APPROVAL, SURVEILLANCE, AND ENFORCEMENT OF HAZARDOUS**

sible for providing surveillance of the program. POI's who become aware of negative findings or problems associated with an operator's approved hazardous materials or dangerous goods program during unrelated surveillance should contact the PSI who may take further action.

**223. PROCEDURES FOR APPROVAL OF HAZARDOUS MATERIALS OR DANGEROUS GOODS TRAINING PROGRAMS.** POI's should advise operators to use Advisory Circular 121-21B, "Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials" as a guide when preparing their training programs. The POI is the FAA point of contact for the operator and is the final approving authority for the operator's training program. The PSI is the technical expert, however, and must review the operator's training program before approval can be made. The operator should coordinate with the PSI as necessary to formulate a satisfactory hazardous materials or dangerous goods training program.

*A. Approval and Revision.* Operators should submit three copies of the curriculum outlines to the POI in the format prescribed in either FAR 135.325 or FAR 121.405. The POI must then forward the curriculum to the PSI, who will contact the operator to coordinate any changes that may be required. Upon receipt of written acceptance from the PSI, the POI shall grant final approval using standard approval procedures used for operator training programs.

*B. Initial and Final Approval.* The POI should grant initial approval to newly developed training programs after they are reviewed by the PSI. The POI may then grant final approval of an operator's hazardous materials or dangerous goods training program after coordinating with the PSI who monitors training and determines that there are no hazardous materials or dangerous goods incidents or inspections that reflect poorly on the program.

**227. REQUIRED HAZARDOUS MATERIALS OR DANGEROUS GOODS INFORMATION.** Operators who transport hazardous materials or dangerous goods must provide instruction and procedures on the following basic subjects. The following information is provided as background material for the aviation safety inspector (ASI) and is not intended to supplant nor provide guidance for an operator's hazardous materials or dangerous goods program. POI's may share this information when requested, but must ensure that the operator understands that the PSI is the FAA authority that the operator must work with when developing, implementing, or changing a hazardous materials or dangerous goods program.

**NOTE:** See table 2.3.5.1. for a list of applicable regulatory references.

*A. Procedures and Instructions on Acceptance of Hazardous Materials or Dangerous Goods for Air Shipment.* The operator's instructions should contain the following information:

(1) *Packaging.* The material must be properly packaged in accordance with the packaging rules and it must be properly marked, labeled, and documented. The total number of items must be within the quantity limitations and the shipment must be accompanied by the proper shipper certificates, Department of Transportation (DOT) exemptions, or competent authority certificates, as determined by the inspection requirements for accepting shipments in 49 CFR Part 175.

(2) *Damage-Free.* The package may not leak or be damaged, and must be an authorized package in accordance with the applicable regulations.

(3) *Authorization of Carriage.* The package must either be authorized for carriage in passenger-carrying

(5) *Properly Labeled.* The package must be properly marked and labeled in accordance with 49 CFR or the ICAO Technical Instructions.

(6) *Shipper Certificates.* Shipper certificates must be reviewed to ensure that all necessary information is entered, including any additional information that may be required because of the commodity shipped, or because the method of transportation is related to air transportation.

(7) *Notification Instructions.* The package must include instructions to notify shippers if the package is damaged in shipment.

*B. Storage of Hazardous Materials or Dangerous Goods.* Operators should provide specific guidance on the storage of hazardous materials or dangerous goods. This guidance should include instructions for Class 8 (corrosive), Class 7 (radioactive), and Class 6, Division 6.1 (poisonous) materials as discussed below:

(1) *Corrosive Materials (Class 8).* The storage of Class 8 (corrosive) materials next to, or in contact with, Class 4, Division 4.2 or 4.3 (flammable) solids or Class 5, Division 5.1 (oxidizing) materials must be prevented. The segregation prescribed in FAR 175.78, Table 1, must be maintained for all packages containing hazardous materials or dangerous goods that might react dangerously when stored adjacent to each other or when stored in a position that causes or contributes to leakage.

(2) *Radioactive Materials (Class 7).* The storage of Class 7 (radioactive) materials labeled yellow II and/or yellow III will not exceed 50 transport indexes (TI) in a single storage location. These materials are stored in an area that is isolated from people and does not admit pedestrian traffic or loitering. The minimum separation distances prescribed in FAR 175.703 should be maintained between radioactive materials labeled yellow II and yellow



The operator should provide specific guidance for loading hazardous materials or dangerous goods. This guidance should include:

- Loading of hazardous materials or dangerous goods in aircraft in accordance with 49 CFR Subpart B, Part 175
- Loading and carriage of hazardous materials or dangerous goods in cargo-only aircraft, when other means of transportation are not available or impracticable, in accordance with FAR 175.320
- Loading of radioactive materials in aircraft in accordance with FAR 175.700(a)(4), to ensure that TI limitations are in accordance with the provisions of FAR's 175.75(a)(3) and 175.700(a)(1) and (2), and that radioactive packages are transported in accordance with FAR's 175.701, 175.702, and 175.703
- Loading of hazardous materials or dangerous goods in cargo compartments or freight containers within cargo compartments, in accordance with FAR 175.75
- Loading of other regulated materials (ORM) aboard aircraft
- A prohibition against loading packages bearing a poison label in the same compartment that holds foodstuffs, feeds, or any edible materials intended for consumption by humans or animals unless both commodities are in separate, closed-unit load devices known as freight containers

D. *Written Notification of Pilot-In-Command (PIC).* Operators must establish procedures for notifying the PIC when hazardous materials or dangerous goods are carried on board the aircraft.

*Packages.* The operator must develop procedures for handling damaged packages in accordance with FAR 175.90, radioactive contamination in accordance with 49 CFR 175.700(b), and substances in Class 6, Division 6.2 (infectious substances), as found in FAR 175.45. The information should include a list of telephone numbers and addresses of organizations that can provide technical advice on clean-up techniques and precautions to minimize the possibility of injury to employees and the general public. Some names of appropriate organizations for such advice include the following: Chemtree, U.S. Energy Research and Development Administration, a state public health department, a federal or state office of hazardous materials or dangerous goods regulation, and the Center for Disease Control of the U.S. Public Health Service.

G. *Special Requirements for Poisons.* If an operator is authorized to handle poisons, the operator's manual must include procedures for handling packages bearing a poison label in compliance with FAR 175.630.

**229. COORDINATION.** The POI may be required to act as a coordinator between the operator and the Office of Civil Aviation Security. Figure 2.3.5.2. lists FAA hazardous material coordinators by regional and geographic areas. These coordinators, or their special agents, may be contacted regarding all aspects of the air transportation of hazardous materials or dangerous goods.

**231. EXEMPTIONS.** When an operator applies for either an initial DOT exemption or the renewal of an exemption for the carriage of certain hazardous material in air commerce, the POI and the principal maintenance inspector (PMI) may need to assist the civil aviation security division in reviewing the compliance history of the certificated operator. There are two types of exemptions: an exemption which is valid for 2 years and is obtained through the standard exemption process and, an emergency exemption that is issued to the shipper who hires and provides the name of the operator in the exemption. The emergency

and investigations of the transportation of hazardous materials or dangerous goods in air commerce operations.

**235. SOURCES OF INFORMATION.** The following regulations and publications pertaining to the safe transportation of hazardous materials or dangerous goods are for sale and can be obtained from the addresses listed below:

A. *National Sources.* National sources of information pertaining to the safe transportation of hazardous materials or dangerous goods are as follows:

(1) *U.S. CFR, Title 14, Aeronautics and Space, Parts 91, 121, 125, and 135.* This reference contains the regulations that are applicable to air carrier and air taxi operations and helicopter operations, and defines the duties and responsibilities for conducting training programs and procedural manuals dealing with the air transportation of hazardous materials or dangerous goods.

(2) *U.S. CFR, Title 49, Transportation, Parts 100-177 and 178-199.* This title contains the regulations dealing with the proper identification, classification, packaging, labeling, marking, and certification of hazardous materials or dangerous goods transported in commerce. These national sources of information may be obtained from the following address:

Superintendent of Documents  
Public Document Department  
Government Printing Office  
Washington, DC 20402  
(202) 783-3238

(3) Advisory Circular (AC) 121-21B, "Information Guide for Training Programs and Manual Requirements in the Air Transportation of Hazardous Materials."

dangerous goods by air. These regulations are issued in a 2-year edition on alternate Septembers, becoming effective the following January 1.

(2) *IATA Dangerous Goods Regulations.* These regulations are published by the International Air Transport Association (IATA) for their members and associate members. With few exceptions, they are closely aligned with the ICAO Technical Instructions. These regulations also provide operator exceptions and, in certain instances, state variations which may not be included in any other publication. IATA dangerous goods regulations are published on an annual basis and may be obtained from the following address:

Labelmaster  
5724 North Pulaski Road  
Chicago, Illinois 60646  
(800) 621-5808 or (312) 478-0900

and

International Air Transport Association (IATA)  
2000 Peel Street  
Montreal, Quebec  
Canada H3A 2R4

C. *Other International Regulations Dealing With Hazardous Materials or Dangerous Goods.* Other international regulations dealing with hazardous materials or dangerous goods are as follows:

(1) *United Nations Publication, Transport of Dangerous Goods.* These recommendations were prepared by the United Nations Committee of Experts on the Transport of Dangerous Goods, document No. ST/SG/AC.10, and may be obtained from the following addresses:

(2) *International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Materials, Safety Series No. 6, document no. STI/PUB/323.* These regulations provide the international standards for the transport of radioactive materials as promulgated by IAEA and are the regulations which the Department of Transportation and the U.S. Nuclear Regulatory Commission have drawn from the amending Title 49 CFR and Title 10 CFR Part 71.

(3) *International Atomic Energy Agency (IAEA) Safety Series No. 37, Advisory Material for the Application of the IAEA Transport Regulations.* This information may be obtained from the following organization:

UNIPUB  
1180 Avenue of the Americas  
New York, New York 10038

D. *Training Material.* ICAO and IATA have jointly developed training documents in support of the provisions contained in Annex 18 to the Convention on International Civil Aviation. These documents help achieve uniform,

Book 1: Shippers and Packers  
Book 2: Cargo Agents  
Book 3: Operators Cargo Staff  
Book 4: Load Planners and Cargo Handlers  
Book 5: Flightcrew  
Book 6: Passenger Handling Staff and Flight Attendants

(2) This series of self-help training manuals may be obtained from one of the following offices:

International Civil Aviation Organization  
Attention: Distribution Officer  
1000 Sherbrooke Street West, Suite 400  
Montreal, Quebec  
Canada H3A 2R2

or

International Air Transport Association (IATA)  
2000 Peel Street  
Montreal, Quebec  
Canada H3A 2R4

236. RESERVED.

<b>Materials and Classifications</b>		
<b>Shipping Paper and Certificate Requirements</b>	<b>Part 172</b>	<b>4,4.1 - 4.3</b>
<b>* Packaging, Marking, and Labeling</b>	<b>Parts 171, 172, 173, and 175</b>	<b>4,1.1 - 4,3.4</b>
<b>Airport Security</b>	<b>Part 107</b>	<b>1,1, 2,12</b>
<b>* Exceptions to the Regulations</b>	<b>FAR 175.10</b>	<b>1,2,3</b>
<b>Written Notification of PIC</b>	<b>FAR 175.33</b>	<b>5,4.1</b>
<b>Keeping and Replacement of Lost or Damaged Labels</b>	<b>FAR 175.40</b>	<b>5,2.6</b>
<b>* Reporting Hazardous Materials Incidents/ Deficiencies</b>	<b>FAR 175.45</b>	<b>5,4.5 - 4.6</b>
<b>Loading, Unloading, and Handling</b>	<b>Subpart B, Part 175</b>	<b>5,2.1 - 5,2.15</b>
<b>Specific Regulations Applicable According to Classification of Material</b>	<b>Subpart C, Part 175</b>	<b>2,12</b>

\* Operators that will not accept or transport hazardous materials or dangerous goods only have to train in these subjects.

12 New England Executive Park  
Burlington, Massachusetts 01803

Phone #: (617) 263-6352

---

**ASO**

Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, ASO-700  
Southern Region  
P.O. Box 20636  
Atlanta, Georgia 30320

Phone #: (404) 763-7605

---

**ACE**

Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, ACE-700  
Central Region  
601 East 12th Street  
Kansas City, Missouri 64106

Phone #: (816) 384-3901

---

**AWP**

Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, AWP-700  
Western-Pacific Region  
P.O. Box 92007  
Worldway Postal Center  
Los Angeles, California 90009

Phone #: (310) 536-6329

---

**AAL**

Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, AAL-700  
Anchorage Federal Office Building (AFOB)  
222 West 7th Avenue, Box 14  
Anchorage, Alaska 99513-7587

Phone #: (907) 266-8577

---

**JFK International Airport  
Jamaica, New York 11430**

**Phone #: (718) 553-1252**

---

**AGL**

**Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, AGL-700  
Great Lakes Region  
2300 East Devon Avenue  
Des Plaines, Illinois 60018**

**Phone #: (312) 694-7114**

---

**ASW**

**Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, ASW-700  
Southwest Region  
P.O. Box 1689  
Forth Worth, Texas 76101**

**Phone #: (817) 624-5700**

---

**ANM**

**Hazardous Materials or Dangerous Goods Coordinator  
Civil Aviation Security Division, ANM-700  
Northwest Mountain Region  
1601 Lind Avenue, S.W.  
Renton, Washington 98055-4056**

**Phone #: (206) 227-2700**

---

**WASHINGTON HEADQUARTERS**

**Hazardous Materials or Dangerous Goods Program Manager  
Office of Civil Aviation Security, ACO-130  
800 Independence Avenue, S.W.  
Washington, DC 20591**

**Phone #: (202) 267-3951**

---

**[PAGES 2-155 THROUGH 2-156 RESERVED]**

request or are required to obtain designators. Designators are used by commercial, domestic and international operators for air traffic control (ATC) operations. Designators are also used in the Aeronautical Fixed Telecommunications Network (AFTN) system for identification, communication, and billing purposes. The AFTN system is an integrated, international system of aeronautical fixed circuits. The AFTN system provides the exchange of messages and flightplans between aeronautical and fixed stations within the network. The designators are assigned when the FAA determines that designators are advantageous and operationally appropriate to the U.S. ATC system. A company designator and a radiotelephony designator are assigned as a unit. The four types of designators, are entitled and described as follows:

- The company designator (ICAO three-letter designator)
- The radiotelephony designator (call sign)
- The special radiotelephony designator (special handling)
- The local radiotelephony designator (local VFR operations only)

A. *The Company Designator (ICAO three-letter designator).* The ICAO company designator is a three-letter designator. The flight number serves as the aircraft identification in the ATC system. The designator serves as the aircraft identification for the ATC system in several situations. The authorized three-letter designator and flight/trip number are used instead of the aircraft registration number and may be used for the international telecommunications service when its use is advantageous for ATC and operational purposes. The company designator may be used to expedite the exchange of written and computerized air carrier information in both the domestic and

or more non-seasonal, scheduled international air operations each week or, at least 15 non-seasonal, scheduled domestic round trip air operations each week, and generate appropriate flightplans and other related flight operations over the AFTN. Aircraft operators which generate less than the prescribed international and/or domestic flight operations may be waived on an individual basis.

B. *The Radiotelephony Designator (Call Sign).* The radiotelephony designator call sign is usually assigned at the same time as the ICAO three-letter designator, and the call sign becomes the aircraft identification for air and ground communications with air traffic personnel. Usually, the company name or a pronounceable abbreviation of the company name is used in combination with ATC facilities and operating services. An example is American 411. This designator replaces the standard "type/tail number" combination such as Cessna 398J. The radiotelephony designator should be phonetically pronounceable in at least the English, French, or Spanish language. The name of the aircraft company, operating authority, or servicing organization should resemble the radiotelephony designator, and the designator should not consist of more than two words and three syllables. An advantage of using radiotelephony designators is the reduction of on-line noise distractions that create similar sounding radiotelephony-designator confusion, expedite air and ground communication, provide easy auditory recognition, and reduce the potential for mistakes in verbal communication. A new or changed radiotelephony designator must be included in the remarks section of the operator's flightplans for at least 60 days following the new designator's effective date.

C. *The Special Radiotelephony Designator.* A special radiotelephony designator may be temporarily authorized by the Air Traffic Publication Branch, ATP-210, in coordination with ICAO, only when its assignment will identify special handling by ATC. ATP-210 may authorize the special designator for a commemorative flight, for a large number of aircraft participating in an organized race, for aircraft

designators be obtained; however, designators may be required by the operator's operations specifications (OpSpecs). The FAA may choose to assign a three-letter ICAO company and radiotelephony designator for operations based on the number of scheduled flights. The final approval of the company designators and radiotelephony designator is made by ICAO, who takes into consideration all designators approved throughout the world. The designator assignment is then administered by ATP-210. The final approval of the special radiotelephony designator and local radiotelephony designator is made by ATP-210 after checking the requested area of operations for conflict.

**241. PROCEDURES FOR ASSIGNMENT OF DESIGNATORS.** All requests for designators are directly made by the company to the POI. The POI sends the request to the regional air traffic division. Final designator assignment is administered by Washington Headquarters, Airspace-rules and Aeronautical Information Division, Air Traffic Publication Branch, ATP-210. ATP-210 notifies the Federal Communications Commission that an assignment has been made.

A. *The Company Designator and the Radiotelephony Designator.* POI's must have the following information to determine eligibility for both the ICAO three-letter company designator and the radiotelephony designator:

- The name and address of the operator
- The type of aircraft operation or service provided (a list of the operators served is required for service operations)
- The intended use of aeronautical fixed telecommunications network systems (AFTN) for international services or operations

ducted

- Provision of at least five suggested three-letter designators and radiotelephony designators, listed in their desired order

B. *Special Radiotelephony Designator.* The following information must be submitted for the special radiotelephony designator request:

- Type of flight
- Type of handling required
- Type and number of aircraft
- Routes and duration of operation

C. *Local Radiotelephony Designator.* A letter of agreement that provides justification for obtaining the designator must be made between the local tower and the requesting company. The letter of agreement is reviewed by the regional air traffic division, which adds its recommendations to the letter and forwards the agreement and accompanying recommendations to ATP-210. ATP-210 checks the area of operations for conflict and approves if there is no conflict of designators.

**243. EFFECTIVE DATE AND PUBLICATION.** The required administrative period for approval of a three-letter company and radiotelephony designator is approximately 45 calendar days. ATP-210 establishes an effective date for the designator and enters it into the stored flightplan program. ATP-210 advises the FAA facilities affected that the numbers will be published in FAA and ICAO documents (ICAO Document 8585, "Designators for Aircraft Operating Agencies, Aeronautical Authorities, and Services" and ATC Order 7340.1, "Contractions" manual). Failure to submit the



and Services."

- Operations permanently suspended or cancelled
- Change in the name, address, or physical location of the company

**248. - 254. RESERVED.**

**[PAGE 2-160 RESERVED]**



1. Applicability .....	3-1
3. History of OpSpecs .....	3-1
5. Conceptual Need for OpSpecs .....	3-1
7. Legal Basis for OpSpecs .....	3-1
9. Standard OpSpecs .....	3-2
11. Availability of OpSpecs to Crewmembers and Other Employee Personnel .....	3-2
12.-20. Reserved .....	3-2

## Section 2. AUTOMATED OPERATIONS SPECIFICATIONS

21. General .....	3-13
23. Air Operator Vital Information Subsystem .....	3-13
25. Operations Specifications Checklist .....	3-14
27. Operations Specifications Worksheets .....	3-14
29. Drafts of Operations Specifications .....	3-15
31. Format of Automated Operations Specifications .....	3-15
33. Table of Contents for Operations Specifications .....	3-16
35. Automated Features and Symbolology of Automated Operations Specifications Paragraphs .....	3-16
37. Additional Text .....	3-22
39. Reserved Paragraphs and Nonstandard Paragraphs .....	3-22
41. Printing Automated Operations Specifications .....	3-23
43. Completing the Reverse Side and Approval of Operations Specifications .....	3-23
45. Operator's Receipt of Approved Operations Specifications .....	3-25
46.-60. Reserved .....	3-25

## Section 3. OPERATIONS SPECIFICATIONS PART A - GENERAL

61. Discussion .....	3-38
63. A1-Issuance and Applicability .....	3-38

79.	A9-Airport Aeronautical Data . . . . .	3-51
81.	A10-Aeronautical Weather Data . . . . .	3-51
83.	A11-Approved Carry-On Baggage Program . . . . .	3-52
85.	A12-Domestic Operations to Certain Foreign Airports . . . . .	3-52
87.	A13-Part 121 Operations Without Certain Emergency Equipment . . . . .	3-52
89.	A14-IFR Operations Outside Controlled Airspace . . . . .	3-53
91.	A15-Autopilot in Lieu of Required Second-In-Command . . . . .	3-53
93.	A16-Single Pilot, Single Pilot-In-Command, or Basic Part 135 Operators . . . . .	3-54
95.	A17-Approved Security Program for Helicopters . . . . .	3-54
97.	A18-Scheduled Helicopter Operations . . . . .	3-54
99.	A19-Automotive Gasoline as Aircraft Fuel . . . . .	3-55
101.	A20-Airplane Operations Without Instrument-Rated Pilots . . . . .	3-55
103.	A21-Aeromedical Helicopter Operations . . . . .	3-56
105.	A28-Aircraft Wet Lease Arrangements . . . . .	3-57
107.	A29-Aircraft Interchange Arrangements . . . . .	3-57
109.	A30-Part 121 Supplemental Operations . . . . .	3-57
110.-120.	Reserved . . . . .	3-57

#### Section 4. PART B - EN ROUTE AUTHORIZATIONS AND LIMITATIONS

121.	B31-Areas of En Route Operation . . . . .	3-64
123.	B32-En Route Limitations and Provisions . . . . .	3-64
125.	B33-Flight Rules, Limitations, and Provisions . . . . .	3-64
127.	B34-Class I Navigation Using Area Navigation Systems . . . . .	3-64
129.	B35-Class I Navigation in the U.S. Positive Control Area (PCA) Using Area or Long-Range Navigation Systems . . . . .	3-65
131.	B36-Class II Navigation Using Long-Range Navigation Systems or a Flight Navigator . . . . .	3-65
133.	B37-Operations in Central East Pacific (CEPAC) Composite Airspace . . . . .	3-66
135.	B38-North Pacific (NOPAC) Operations . . . . .	3-67
137.	B39-Operations Within North Atlantic (NAT) Minimum Navigation Performance Specifications (MNPS) Airspace . . . . .	3-67
139.	B40-Operations in Areas of Magnetic Unreliability . . . . .	3-68

149.	B50-Authorized Areas of En Route Operation, Limitations, and Procedures .....	3-72
150.-160.	Reserved .....	3-76
Section 5. PART C - AIRPLANE TERMINAL INSTRUMENT PROCEDURES AND AIRPORT AUTHORIZATIONS AND LIMITATIONS		
161.	General .....	3-85
163.	C51-Terminal Instrument Procedures .....	3-85
165.	C52-Basic Instrument Approach Procedure Authorizations-All Airports .....	3-85
167.	C53-IFR Landing Minimums Other than Categories II and III-All Airports .....	3-85
169.	C54-Special Limitations and Provisions for Instrument Approach Procedures and IFR Landing Minimums .....	3-85
171.	C55-Alternate Airport IFR Weather Minimums .....	3-85
173.	C56-IFR Takeoff Minimums, Part 121 Operations-All Airports .....	3-86
175.	C57-IFR Takeoff Minimums, Part 135 Operations-All Airports .....	3-86
177.	C58-Special Restrictions for Foreign Terminal Instrument Procedures .....	3-86
179.	C59-Category II Instrument Approach and Landing Operations .....	3-86
181.	C60-Category III Instrument Approach and Landing Operations .....	3-91
183.	C61-Flight Control Guidance Systems for Automatic Landing Operations Other than Categories II and III .....	3-96
185.	C62-Manually-Flown Flight Control Guidance System Certified for Landing Operations Other than Categories II and III .....	3-96
187.	C63-Instrument Approach Operations Using an Area Navigation System (TBD)* ..	3-97
189.	C64-Special Terminal Area IFR Operations-Authorizations, Limitations, and Provisions .....	3-97
191.	C65-Powerback Operations with Airplanes .....	3-97
193.	C66-Turbojet Airplane Takeoff Operations in Tailwind Conditions .....	3-98
195.	C67-Special Airport Authorizations, Provisions, and Limitations .....	3-98
197.	C67-Airports Authorized for Scheduled Operations .....	3-99
198.-210.	Reserved .....	3-99

\*(TBD)=TO BE DEVELOPED

	and III Approaches-All Airports . . . . .	3-106
219.	H104-Helicopter En Route Descent Areas . . . . .	3-106
221.	H105-Alternate Airport IFR Weather Minimums . . . . .	3-107
223.	H106-IFR Takeoff Minimums, Helicopter Operations-All Airports . . . . .	3-107
225.	H107-Special Restrictions for Foreign Terminal Instrument Procedures (TBD)* . . .	3-107
227.	H108-Category II Instrument Approach and Landing Operations (TBD)* . . . . .	3-107
229.	H109-Category III Instrument Approach and Landing Operations . . . . .	3-107
231.	H110-Flight Control Guidance Systems for Automatic Landing Operations Other than Categories II and III . . . . .	3-107
233.	H111-Manually-Flown Flight Control Guidance System Certified for Landing Operations Other than Categories II and III (TBD)* . . . . .	3-108
235.	H112-Instrument Approach Operations Using and Area Navigation System (TBD)* . . . . .	3-108
237.	H113-Special Terminal Area IFR Operations-Authorizations, Limitations, and Provisions . . . . .	3-108
239.	H114-Special Airport Authorization, Provisions, and Limitations (TBD)* . . . . .	3-108
241.	H120-Airports Authorized for Scheduled Operations . . . . .	3-108
242.-260.	Reserved . . . . .	3-109

## Section 7. AMENDMENT, SURRENDER, AND SUSPENSION REPLACEMENT OF OPERATIONS SPECIFICATIONS

261.	Applicability . . . . .	3-123
263.	Amendment Process Using Automated OpSpecs . . . . .	3-123
265.	Amendment of OpSpecs . . . . .	3-123
267.	Emergency Amendment of OpSpecs . . . . .	3-124
269.	Operator Appeal Rights . . . . .	3-125
271.	Surrendering of OpSpecs . . . . .	3-126
273.	Suspension of OpSpecs . . . . .	3-126
274.-280.	Reserved . . . . .	3-126

*\*(TBD)=TO BE DEVELOPED*

283. Definitions .....	3-157
285. Aircraft Families .....	3-159
287. Training Programs: A Schematic Depiction .....	3-160
289. Categories of Training .....	3-162
291. Applicability of Training Categories .....	3-166
293. Curriculum Development .....	3-166
295. Curriculum Segments .....	3-167
297. Training Module Construction (Elements or Events) .....	3-169
299. Deleted .....	3-170
300.-310. Reserved .....	3-170

## Section 2. TRAINING APPROVAL PROCESS

311. General .....	3-175
313. Operations Conducted Under Both Parts 121 and 135 .....	3-175
315. Initiating the Approval Process - Phase One .....	3-175
317. FAA Involvement In Phase One .....	3-176
319. Requests for Initial Approval - Phase Two .....	3-177
321. Additional Relevant Supporting Information - Phase Two .....	3-178
323. Initial Review of Requests for Approval - Phase Two .....	3-178
325. Training Curriculums Submitted with Air Operator Certificate Applications .....	3-179
327. Indepth Review of Submitted Curriculums - Phase Three .....	3-179
329. Expiration Dates for Initial Approvals .....	3-180
331. Method of Granting Initial Approval .....	3-180
333. Method of Denying Initial Approval .....	3-183
335. Evaluating Initially-Approved Training Curriculums - Phase Four .....	3-184
337. Elements Available for Evaluating Training - Phase Four .....	3-184
339. Method for Granting Final Approval - Phase Five .....	3-186
341. Revisions to Training Curriculums .....	3-188
343. Withdrawing Approval of Training Curriculums .....	3-188
345. Expired Training Curriculums .....	3-188
347. Withdrawal of Initial Approval of Training Curriculums .....	3-189
349. Withdrawal of Final Approval of Training Curriculums .....	3-190

365. Operator-Specific Indoctrination .....	3-203
367. Airman-Specific Indoctrination Training .....	3-203
369. Flightcrew Basic Indoctrination Training Modules. ....	3-204
371. Training Hours .....	3-205
373. Course Completion Requirements .....	3-206
375. Content of Flightcrew Basic Indoctrination Curriculum Segments .....	3-206
377. Operator-Specific Training Modules .....	3-206
379. Airman-Specific Training Modules .....	3-207
381. Evaluation of Flightcrew Basic Indoctrination Curriculum Segment Outlines for Initial Approval .....	3-208
383. Flight Crewmember Basic Indoctrination Curriculum Segment Job Aid .....	3-208
384.-390. Reserved .....	3-209

#### Section 4. FLIGHTCREW GENERAL EMERGENCY TRAINING CURRICULUM SEGMENTS

391. General .....	3-218
393. General Emergency Training Curriculum Segments .....	3-218
395. Current General Emergency Training .....	3-219
397. General Emergency Training Modules .....	3-220
399. Training Hours .....	3-221
401. Course Completion Requirements .....	3-222
403. Content of Flight Crewmember General Emergency Training Curriculum Segments .....	3-222
405. Emergency Situation Training Modules .....	3-222
407. Emergency Drill Training Modules .....	3-223
409. Recurrent General Emergency Training Modules .....	3-223
411. Cabin and Exit Mockups .....	3-224
413. Evaluation of Flight Crewmember General Emergency Training Curriculum Segment Outlines for Initial Approval .....	3-224
415. Flight Crewmember General Emergency Training Job Aid .....	3-224
416.-424. Reserved .....	3-224



431. Aircraft Ground Training Modules . . . . .	3-233
433. Training Hours . . . . .	3-235
435. Course Completion Requirements . . . . .	3-238
437. Content of Aircraft Ground Curriculum Segments . . . . .	3-238
439. General Operational Subjects . . . . .	3-238
441. Aircraft Systems . . . . .	3-240
443. Aircraft Systems Integration Training . . . . .	3-241
445. Ground Training Devices . . . . .	3-242
447. Evaluation of Ground Training Curriculum Segment Outlines for Initial Approval . . . . .	3-243
449. Aircraft Ground Training Curriculum Segment Job Aid . . . . .	3-243
450.-460. Reserved . . . . .	3-243

## Section 6. FLIGHT TRAINING CURRICULUM SEGMENTS

461. General . . . . .	3-253
463. Flight Training Objectives . . . . .	3-253
465. Qualification Objectives . . . . .	3-253
467. Flight Training Modules or Event Outlines . . . . .	3-253
469. Training Hours . . . . .	3-254
471. Course Completion Requirements . . . . .	3-259
473. Evaluation of Flight Training Curriculum Segment Outlines for Initial Approval . . . . .	3-259
475. Evaluating the Operator's Maneuvers and Procedures Document . . . . .	3-259
477. Aircraft Families . . . . .	3-260
479. Flight Training Devices and Flight Simulators . . . . .	3-260
481. Level 4 - Flight Training Device . . . . .	3-260
483. Level 5 - Flight Training Device . . . . .	3-261
485. Level 6 - Flight Training Device . . . . .	3-261
487. Level 7 - Flight Training Device . . . . .	3-261
489. Level A Flight Simulator . . . . .	3-262
491. Level B Flight Simulator . . . . .	3-262
493. Level C Flight Simulator . . . . .	3-263
495. Level D Flight Simulator . . . . .	3-263

505. FE Initial Equipment, Initial New-Hire, Transition and Recurrent Flight Training: Transport Category Airplanes .....	3-274
507. PIC/SIC Flight Training (All Training Categories): Multiengine General Purpose Airplanes .....	3-277
509. PIC/SIC Flight Training (All Training Categories): Single-Engine Airplanes .....	3-280
511. PIC/SIC Flight Training (All Training Categories): Helicopters .....	3-283
512.-522. Reserved .....	3-285

## Section 7. FLIGHTCREW QUALIFICATION CURRICULUM SEGMENTS

523. General .....	3-293
525. Types of Qualification Modules .....	3-293
527. Format of Qualification Curriculum Segments .....	3-294
529. Part 121 Required Certificates .....	3-294
531. Part 135 Required Certificates .....	3-294
533. Part 135 Minimum PIC Flight Experience Requirements .....	3-295
535. The Basic Checking Module .....	3-296
537. Part 121 Basic Checking Module .....	3-296
539. Part 135 Basic Checking Module .....	3-301
541. Deleted .....	3-309
543. Credit for Certification Flight Checks .....	3-309
545. Conduct of Proficiency and Competency Checks .....	3-309
547. Use of Flight Training Devices and Simulators for Proficiency and Competency Checks .....	3-310
549. The "Operating Experience" (OE) Qualification Module .....	3-310
551. The Line Check Qualification Module .....	3-312
553. Additional Checking Modules .....	3-313
554.-566. Reserved .....	3-314

## Section 8. SPECIAL CURRICULUM SEGMENTS

567. General .....	3-323
569. Special Curriculum Segment Content .....	3-323
571. Special Curriculum Segment Approval .....	3-323

579. General .....	3-331
581. Methods for Accounting for Differences .....	3-331
583. Specific Situations Requiring Differences Training .....	3-332
585. Differences Evaluation .....	3-332
587. Degrees of Differences .....	3-334
589. Recurrent Differences Training and Currency Events .....	3-334
591. Approval Process .....	3-335
593. Seat Dependent Training .....	3-335
594.-598. Reserved .....	3-335

## Section 10. FLIGHTCREW RECURRENT TRAINING CURRICULUMS

599. General .....	3-343
601. Objective of Recurrent Training .....	3-343
603. Training/Checking Month and Eligibility Periods .....	3-343
605. Recurrent Aircraft Ground Training Curriculum Segments .....	3-344
607. Written or Oral Testing .....	3-345
609. Recurrent General Emergency Training Curriculum Segments .....	3-345
611. Recurrent Flight Training and Qualification Curriculum Segments - Part 121 .....	3-346
613. Recurrent Flight Training and Qualification Curriculum Segments - Part 135 .....	3-347
614.-616. Reserved .....	3-348

## Section 11. FLIGHTCREW REQUALIFICATION TRAINING CURRICULUMS

617. General .....	3-353
619. Re-Establishing Landing Currency of Part 121 Pilots .....	3-353
621. Re-Establishing Currency of Part 121 Flight Engineers .....	3-354
623. Re-Establishing Landing Currency of Part 135 Pilots .....	3-354
625. Requalification for Failure to Complete Recurrent Training During the Eligibility Period .....	3-355
627. Crewmembers Who are Noncurrent or Overdue Upon Reassignment to a Different Type of Aircraft .....	3-357
629. Crewmembers Reassigned to a Previously Held Duty Position in an Aircraft Currently Being Flown .....	3-357

## Section 1. GENERAL

637. Introduction .....	3-365
639. Regulatory Requirements .....	3-365
641. Definitions .....	3-365
643. Check Airman Role and Characteristics .....	3-366
645. Classifications of Check Airmen .....	3-366
647. Proficiency Check Pilot - Aircraft .....	3-366
649. Proficiency Check Pilot - Simulator .....	3-367
651. Line Check Pilot - All Seats .....	3-368
653. Line Check Pilot - Observer's Seat Only .....	3-368
655. Check Pilot - All Checks .....	3-369
657. Check Flight Engineer - Airplane Only .....	3-369
659. Check Flight Engineer - All Checks .....	3-369
661. Air Transportation Instructor Role and Characteristics .....	3-370
663. Air Transportation Flight Instructor - Aircraft .....	3-370
665. Air Transportation Flight Instructor - Simulator Only .....	3-371
667. Air Transportation Ground Instructor .....	3-371
669. Part 121 Air Transportation Supervisors .....	3-372
670.-680. Reserved .....	3-372

## Section 2. CHECK AIRMAN APPROVAL PROCESS

681. General .....	3-379
683. Phase One - Operator Familiarization with Check Airman Requirements .....	3-379
685. Phase Two - Submission of Documentation .....	3-379
687. Phase Three - Review of Documentation .....	3-379
689. Phase Four - Check Airman Evaluation .....	3-379
691. Phase Five - Check Airman Approval .....	3-381
693. Surveillance of Check Airmen .....	3-385
695. Approval of Initial Cadre Check Airmen .....	3-385
697. Designation of a Check Airman in Multiple Aircraft .....	3-387
699. Approval of a Check Airman to Serve Multiple Operators .....	3-387

713. General .....	3-403
715. Check Airman and Air Transportation Flight Instructor Training .....	3-403
716.-726. Reserved .....	3-405

#### CHAPTER 4. RESERVED (TBD)\*

727.-1044. Reserved .....	3-413
---------------------------	-------

#### CHAPTER 5. AIRCRAFT DISPATCHER TRAINING AND QUALIFICATION PROGRAMS

##### Section 1. AIRCRAFT DISPATCHER TRAINING CURRICULUMS

1045. General .....	3-525
1047. Definitions .....	3-525
1049. Training Programs: A Schematic Depiction .....	3-527
1051. Categories of Training .....	3-529
1053. Curriculum Development .....	3-530
1054.-1060. Reserved .....	3-530

##### Section 2. AIRCRAFT DISPATCHER TRAINING APPROVAL PROCESS (TBD)\*

1061.-1070. Reserved .....	3-537
----------------------------	-------

##### Section 3. AIRCRAFT DISPATCHER BASIC INDOCTRINATION CURRICULUM SEGMENTS

1071. General .....	3-549
1073. Aircraft Dispatcher Basic Indoctrination Training .....	3-549
1075. Aircraft Dispatcher Basic Indoctrination Training Modules .....	3-550
1077. Curriculum Segment Completion Requirements .....	3-551

\*(TBD)=TO BE DEVELOPED

1093. General	3-561
1095. Areas of Emphasis	3-562
1097. Evaluation of Training Hours	3-563
1099. Evaluation of an Aircraft Dispatcher General Ground Training Curriculum Segment Outline for Initial Approval	3-563
1100.-1110. Reserved	3-563

## Section 5. AIRCRAFT DISPATCHER QUALIFICATION CURRICULUM SEGMENTS AND RECURRENT AND REQUALIFICATION CURRICULUMS

1111. General	3-573
1113. Competency Checks	3-573
1115. Operational Familiarization Flights	3-574
1117. Qualification Curriculum Segments of Initial New-Hire and Initial Equipment Categories of Training	3-575
1119. Qualification Curriculum Segments in the Transition Category of Training	3-575
1121. Recurrent Training	3-575
1123. Area Familiarization	3-576
1125. Requalification Training	3-576
1126.-1144. Reserved	3-576

## CHAPTER 6. OPERATIONAL CONTROL

### Section 1. GENERAL TOPICS

1145. Background and Definitions	3-585
1147. Authorized Operations	3-587
1149. Aircraft Dispatchers	3-589
1151. Flight Information	3-590
1153. Weather Information for Control of Flight Operations	3-590
1155. Flight Planning	3-591

## Section 2. FLIGHT DISPATCH SYSTEMS AND DOMESTIC OPERATING RULES

1175. General .....	3-603
1177. Facilities and Staffing .....	3-604
1179. Aircraft Dispatcher Duty Time Limitations .....	3-605
1181. Weather Requirements for Dispatch Under Domestic Rules .....	3-606
1183. Fuel Supply-Domestic Operations .....	3-607
1185. Original Dispatch .....	3-607
1187. Amendment of a Dispatch Release .....	3-608
1189. Load Manifests .....	3-610
1191. En Route Terrain Clearance .....	3-610
1192.-1202. Reserved .....	3-610

## Section 3. PART 121 FLIGHT RELEASE SYSTEMS AND SUPPLEMENTAL OPERATING RULES

1203. General .....	3-617
1205. Familiarity with Weather Conditions, Facilities, and Services .....	3-617
1207. Flight Release System Facilities .....	3-618
1209. Flight Release Form .....	3-618
1211. Weather Requirements for Flight Release Within the Contiguous States .....	3-618
1213. Fuel Supply-Operations in the Contiguous States .....	3-619
1215. Amendment of a Flight Release .....	3-620
1217. En Route Terrain Clearance .....	3-621
1218.-1228. Reserved .....	3-621

## Section 4. PART 121 FLAG OPERATIONS, SUPPLEMENTAL OPERATIONS OUTSIDE THE CONTIGUOUS STATES, AND EXTENDED OVERWATER OPERATIONS

1229. General .....	3-629
1231. Destination Weather Minimums .....	3-629
1233. Designation of Destination Alternate Airports .....	3-629

## Section 5. PART 135 FLIGHT-LOCATING SYSTEMS AND OPERATING RULES

1253. General .....	3-643
1255. General Requirements .....	3-643
1257. Flight-Locating Systems .....	3-643
1259. Part 135 Fuel-Planning Requirements .....	3-644
1261. Weather Requirements .....	3-645
1263. IFR Passenger-Carrying, Over-the-Top Operations .....	3-646
1265. Overwater, Passenger-Carrying Operations .....	3-647
1267. Part 135 Extended Overwater Operations .....	3-647
1268.-1400. Reserved .....	3-647

## CHAPTER 7. AVIATION WEATHER INFORMATION SYSTEMS

### Section 1. GENERAL BACKGROUND INFORMATION

1401. General .....	3-657
1403. Background Discussion .....	3-657
1405. Aeronautical Weather Data .....	3-657
1407. Policy on Conditional Phrases in Remarks Portion of Weather Forecast .....	3-658
1409. Policy for Determining the Continued Adequacy of Weather Reports and Observations .....	3-658
1411. Sources for Technical Assistance and Meteorological References .....	3-659
1413. Definitions, Acronyms, and ICAO Equivalent Terms .....	3-659
1414.-1416. Reserved .....	3-661

### Section 2. PARTS 121/135 WEATHER INFORMATION SYSTEMS

1417. Regulatory Requirements for Weather Information .....	3-666
1419. General Characteristics of a Weather Information System .....	3-666
1421. Weather Information Systems - Operational Requirements .....	3-666
1423. Operational Requirements - Flightcrews .....	3-666



1432.-1434. Reserved .....	3-670
----------------------------	-------

### Section 3. SOURCES OF WEATHER INFORMATION

1435. General .....	3-677
1437. Regulatory Requirements Sources of Weather Reports .....	3-677
1439. Sources of NWS Weather Reports or Sources Approved by NWS .....	3-677
1441. Sources of Weather Reports Approved or Found Satisfactory by the FAA .....	3-678
1443. Sources of Weather Reports Used in Preparing Adverse Weather Phenomena Forecasts .....	3-678
1445. Sources of Weather Forecasts .....	3-678
1447. Automated Weather Reporting Systems .....	3-679
1448.-1452. Reserved .....	3-680

### Section 4. ENHANCED WEATHER INFORMATION SYSTEMS

1453. General .....	3-687
1455. Concept of an EWINS .....	3-687
1457. Characteristic Functions of an EWINS .....	3-687
1459. FAA Policies Concerning EWINS's .....	3-687
1461. EWINS Policies and Procedures Manual .....	3-688
1463. Personnel Qualifications .....	3-689
1465. Training for Dispatchers with FMF Authority .....	3-689
1467. Approval of an EWINS .....	3-691
1468.-1472. Reserved .....	3-691

## CHAPTER 8. AIR CARRIER MANAGEMENT EFFECTIVENESS (TBD)\*

1473.-1550. Reserved .....	3-697
----------------------------	-------

\*(TBD)=TO BE DEVELOPED

1557.	Tests Acceptable to the Administrator . . . . .	3-717
1559.	Handbook Discussion on Proving and Validation Tests . . . . .	3-717
1560.-1564.	Reserved . . . . .	3-717

## Section 2. THE PROVING AND VALIDATION TEST PROCESS

1565.	Phase One . . . . .	3-724
1567.	Phase Two . . . . .	3-724
1569.	Phase Three . . . . .	3-724
1571.	Phase Four . . . . .	3-724
1573.	Phase Five . . . . .	3-724
1574.-1578.	Reserved . . . . .	3-724

## Section 3. PROVING TEST REQUIREMENTS

1579.	General . . . . .	3-729
1581.	Situations Requiring Proving Tests . . . . .	3-729
1583.	Part 121 Operator Proving Test Requirements . . . . .	3-729
1585.	Part 135 Operator Proving Test Requirements . . . . .	3-730
1587.	Proving Test Deviations . . . . .	3-730
1589.	Representative Number of Flights into Airports . . . . .	3-730
1591.	Carriage of Cargo . . . . .	3-730
1593.	Crew Qualifications for Proving Tests . . . . .	3-730
1595.	Aircraft Proving Tests Conducted at Night . . . . .	3-730
1597.	Provisionally Certificated Aircraft . . . . .	3-731
1598.-1602.	Reserved . . . . .	3-731

## Section 4. PLANNING THE PROVING TEST

1603.	Contents of Operator's Plan . . . . .	3-738
1605.	Operator's Plan for Reduced Proving Test Hours . . . . .	3-738
1607.	FAA Planning for Proving Tests . . . . .	3-738
1609.	FAA Proving Test Team . . . . .	3-738
1611.	Other Proving Test Participants . . . . .	3-739

## Section 5. PROVING TESTS: THE DEMONSTRATION PHASE

1623. General .....	3-753
1625. Non-En Route Segment .....	3-753
1627. Conduct of the En Route Segment .....	3-753
1629. Termination of the En Route Segment .....	3-754
1630.-1634. Reserved .....	3-755

## Section 6. THE PROVING TEST REPORT

1635. Content of Proving Test Report .....	3-763
1637. Distribution of Proving Test Report .....	3-764
1638.-1642. Reserved .....	3-764

## Section 7. REQUEST FOR DEVIATION OF PROVING TEST HOURS

1643. General .....	3-769
1645. Evaluating the Operator's Request .....	3-769
1647. Coordination Requirements and Approval Authority for Proving Test Deviations .....	3-770
1648.-1654. Reserved .....	3-771

## Section 8. VALIDATION TEST REQUIREMENTS

1655. General .....	3-778
1657. Situations Requiring Validation Tests .....	3-778
1659. Special Navigation Authorizations .....	3-778
1661. Special Performance Authorizations .....	3-779
1663. Special Operational Authorizations .....	3-779
1665. Planning the Validation Tests .....	3-779
1667. Areas Evaluated When Validation Tests are Required .....	3-780
1669. Carriage of Revenue Passengers During Validation Tests .....	3-780
1671. Special Authorizations Information Tables .....	3-781
1672.-1680. Reserved .....	3-781

1685. Increasing Seating Capacity by Analysis and Test, Phase 1	3-846
1687. Contents of this Chapter	3-846
1688.-1692. Reserved	3-846

## Section 2. THE ABORTED TAKEOFF EMERGENCY EVACUATION DEMONSTRATION

1693. The Aborted Takeoff Demonstration: Phase One	3-859
1695. Briefing the Operator on Demonstration Requirements	3-859
1697. The Operator's Plan	3-861
1699. The Aborted Takeoff Demonstration: Phase Two	3-863
1701. The Aborted Takeoff Demonstration: Phase Three	3-863
1703. The Aborted Takeoff Demonstration: Phase Four	3-863
1705. The Aborted Takeoff Demonstration: Phase Five	3-864
1706.-1710. Reserved	3-864

## Section 3. ABORTED TAKEOFF DEMONSTRATION PROCEDURES

1711. The Demonstration Team	3-868
1713. Predemonstration Meeting with Operator	3-868
1715. FAA Team Planning	3-868
1717. Selecting Exits	3-868
1719. Blocking Exits	3-869
1721. Initiation Signal	3-869
1723. Participants	3-869
1725. Predemonstration Inspection	3-869
1727. Predemonstration Briefings	3-870
1729. Conducting the Demonstration	3-871
1730.-1734. Reserved	3-874

## Section 4. DITCHING DEMONSTRATIONS

1735. General	3-881
1737. Regulatory Requirements	3-881
1739. The Ditching Demonstration Plan	3-882
1741. Review of the Ditching Demonstration Plan	3-882

1749. Areas to be Evaluated .....	3-888
1751. Determining Results of Demonstrations .....	3-888
1752.-1754. Reserved .....	3-888

## Section 6. REPORTING EVACUATION DEMONSTRATIONS

1755. General .....	3-895
1757. FAA Form 8430-1 .....	3-895
1759. Distribution .....	3-895
1760.-1764. Reserved .....	3-895

## Section 7. MAXIMUM PASSENGER SEATING CAPACITY FOR AIRPLANES USED IN PART 121 OPERATIONS

1765. Table of Maximum Demonstrated Seating Capacities .....	3-902
1766.-1770. Reserved .....	3-902

# CHAPTER 11. OPERATOR RECORDKEEPING

## Section 1. GENERAL

1771. General .....	3-951
1773. Characteristics of Information and Records .....	3-951
1775. Regulatory Requirements .....	3-951
1777. Definitions .....	3-952
1779. Mergers and Acquisitions .....	3-953
1780.-1790. Reserved .....	3-953

## Section 2. ACCEPTANCE OR APPROVAL PROCESS

1791. General .....	3-957
1793. Regulatory Requirements .....	3-957

\*(TBD)=TO BE DEVELOPED

1809. Categories of Records .....	3-961
1811. Currency Periods for Recordkeeping Systems .....	3-961
1813. Recommended Advanced Qualification Program (AQP) Urgency Periods (TBD)* .....	3-961
1815. (TBD)* .....	3-961
1816.-1826. Reserved .....	3-961

#### Section 4. COMPUTER-BASED RECORDKEEPING

1827. General .....	3-973
1829. Regulatory Requirements .....	3-973
1831. Guidelines for System Approval .....	3-973
1833. Granting Approval .....	3-975
1835. System Surveillance .....	3-975
1837. Additional System Capabilities .....	3-975
1838.-1850. Reserved .....	3-976

### CHAPTER 12. ENVIRONMENTAL CONSIDERATIONS AND RESPONSIBILITIES

#### Section 1. BACKGROUND INFORMATION

1851. The Public Law .....	3-981
1853. Environmental Responsibilities .....	3-981
1855. Availability of Assistance .....	3-981
1856.-1860. Reserved .....	3-981

#### Section 2. AIRCRAFT NOISE

1861. Pertinent Regulations and Orders .....	3-988
1863. Flight Standards Responsibilities .....	3-988
1864.-1868. Reserved .....	3-989

*\*(TBD) = TO BE DEVELOPED*

1875. Collection of Information .....	3-998
1877. Processing the EA .....	3-998
1878.-1882. Reserved .....	3-999

## CHAPTER 13. LEASE AND INTERCHANGE AGREEMENTS

### Section 1. GENERAL

1883. Background and Definitions .....	3-1007
1884.-1888. Reserved .....	3-1007

### Section 2. DRY LEASE AGREEMENTS

1889. General .....	3-1014
1890.-1894. Reserved .....	3-1014

### Section 3. WET LEASE AGREEMENTS

1895. General .....	3-1021
1897. Processing Wet Lease Agreements .....	3-1021
1899. Determination of Operational Control .....	3-1021
1901. Amending Operations Specifications .....	3-1021
1902.-1906. Reserved .....	3-1022

### Section 4. INTERCHANGE AGREEMENTS

1907. General .....	3-1029
1909. Approval Procedures .....	3-1029
1911. Amending Operations Specifications .....	3-1029
1912.-1916. Reserved .....	3-1029

1923. Categories of Training .....	3-1041
1925. Curriculum Development .....	3-1041
1926.-1934. Reserved .....	3-1042
Section 2. FLIGHT ATTENDANT TRAINING APPROVAL PROCESS (TBD)*	
1935.-1944. Reserved .....	3-1049
Section 3. FLIGHT ATTENDANT BASIC INDOCTRINATION TRAINING CURRICULUM SEGMENT	
1945. General .....	3-1059
1947. Basic Indoctrination Training Subject Areas .....	3-1059
1949. Flight Attendant Basic Indoctrination Training Modules .....	3-1060
1951. Operator-Specific Training Modules .....	3-1061
1953. Flight Attendant-Specific Training Modules .....	3-1062
1955. Curriculum Segment Completion Requirements .....	3-1063
1957. Evaluation of Training Hours .....	3-1063
1959. Evaluation of a Flight Attendant Basic Indoctrination Curriculum Segment Outline for Initial Approval .....	3-1064
1961. Flight Attendant Basic Indoctrination Curriculum Segment Job Aid .....	3-1064
1962.-1972. Reserved .....	3-1064
Section 4. FLIGHT ATTENDANT GENERAL EMERGENCY TRAINING CURRICULUM SEGMENT	
1973. General .....	3-1073
1975. General Emergency Training Subject Areas .....	3-1073
1977. Content of Flight Attendant General Emergency Training Curriculum Segment Outline .....	3-1075
1979. General Emergency Training Modules .....	3-1075
1981. Emergency Equipment Training Modules .....	3-1077

\*(TBD) = TO BE DEVELOPED



1991.	Curriculum Segment Completion Requirements .....	3-1090
1993.	Evaluation of Training Hours .....	3-1090
1995.	Evaluation of Cabin and Exit Mockups .....	3-1091
1997.	Evaluation of Flight Attendant General Emergency Training Curriculum Segment Outline for Initial Approval .....	3-1091
1999.	Flight Attendant General Emergency Curriculum Segment Job Aid .....	3-1092
2000.-2010.	Reserved .....	3-1092

## CHAPTER 15. MANUALS, PROCEDURES, AND CHECKLISTS

### Section 1. BACKGROUND AND DEFINITIONS

2075.	Introduction .....	3-2055
2077.	Overview of Manual Requirements .....	3-2055
2079.	Definitions .....	3-2055
2081.	Distribution and Availability of Manuals .....	3-2057
2083.	Review of Manuals .....	3-2058
2085.	Format and Style of Manuals .....	3-2058
2087.	Adequacy of Procedures .....	3-2060
2088.-2098.	Reserved .....	3-2060

### Section 2. APPROVAL AND ACCEPTANCE OF MANUALS AND CHECKLISTS

2099.	General .....	3-2069
2101.	Phase One: Establishing a Framework for Review .....	3-2069
2103.	Phase Two: Preliminary Review .....	3-2071
2105.	Phase Three: Indepth Review .....	3-2071
2107.	Phase Four: Validation Tests .....	3-2072
2109.	Phase Five: Granting FAA Approval .....	3-2072
2111.	Notification of Deficiencies .....	3-2073
2113.	Emergency Revisions .....	3-2073
2114.-2124.	Reserved .....	3-2073

2135. Operational Control .....	3-2082
2137. Flightplanning .....	3-2083
2139. NOTAM'S and PIREP's .....	3-2083
2141. Restricted or Suspended Operations .....	3-2083
2143. International Operations .....	3-2083
2145. Forward Observer's Seat .....	3-2084
2147. Line Station Operations .....	3-2084
2149. Passenger Briefing Procedures .....	3-2087
2150.-2160. Reserved .....	3-2087

#### Section 4. FLIGHT MANUALS

2161. General .....	3-2095
2163. Approved Airplane Flight Manuals (AFM's) or Approved Rotorcraft Flight Manuals (RFM's) .....	3-2095
2165. Company Flight Manuals .....	3-2096
2167. Aircraft Systems Description .....	3-2097
2169. Procedures .....	3-2097
2171. Normal Procedures .....	3-2098
2173. Maneuvers and Procedures Document .....	3-2099
2175. Nonnormal and Emergency Procedures .....	3-2099
2177. Immediate Actions .....	3-2099
2179. Mandatory Confirmation Items .....	3-2100
2181. Crewmember Roles .....	3-2100
2183. Operations Not Evaluated in Aircraft Certification .....	3-2101
2185. Limitations .....	3-2101
2186.-2196. Reserved .....	3-2101

#### Section 5. AIRCRAFT CHECKLISTS

2197. General .....	3-2109
2199. Checklist Content .....	3-2109
2201. Methods of Checklist Design .....	3-2110
2203. Policies for Managing the Accomplishment of Checklists .....	3-2111

2215. Checklist Format . . . . .	3-2115
2216.-2226. Reserved . . . . .	3-2115



surveillance of Part 121 and Part 135 flightcrew training programs.

A. An applicant for an air carrier certificate or operating certificate is required to develop a training program. An existing operator may need to revise its training program when purchasing new equipment, operating in a new environment, obtaining new authorizations, or when new FAA requirements are specified. These new or revised training requirements must be incorporated into an operator's training program. Each Part 121 and Part 135 certificate holder (with the exception of a Part 135 operator using a single pilot or only one pilot-in-command (PIC) in its operation) must obtain FAA approval of curriculums used for training flight crewmembers, instructors, check airmen, and aircraft dispatchers. The operator is responsible for ensuring that its training program is complete, current, and in compliance with regulations. (Unless otherwise specified in this chapter, the term "operator" applies equally to an applicant for a certificate and an existing certificate holder).

B. It is the policy of Flight Standards Service (FSS) to encourage operators to be innovative and creative when developing training methods and techniques. Principal Operations Inspectors (POI's) are responsible for ensuring that regulatory requirements are met and that the operator's crewmembers and dispatchers can competently perform their assigned duties before they are authorized to enter revenue service. POI's are empowered by FSS to use discretion, allow latitude, and to exercise judgment concerning the details of training program approval and training techniques that operators use.

**283. DEFINITIONS.** The following terms are used throughout this handbook and are defined as follows:

- *Training Program:* A system of instruction which includes curriculums, facilities, instructors, check

Part 121 or Part 135 and ensure that each crewmember and dispatcher remains adequately trained for each aircraft, duty position, and kind of operation in which the person serves.

- *Modular Training:* The concept of program development in which logical subdivisions of training programs are developed, reviewed, approved, and modified as individual units. Curriculum segments and modules may be used in multiple curriculums. The modular approach allows great flexibility in program development and reduces the administrative workload on both operators and instructors in the development and approval of these programs.
- *Categories of Training:* The classification of instructional programs by the regulatory requirement the training fulfills. Categories of training consist of one or more curriculums. The categories of training are initial new-hire, initial equipment, transition, upgrade, recurrent, and requalification.
- *Curriculum:* A complete training agenda specific to an aircraft type, a crewmember or dispatcher duty position, and a category of training. An example is an "initial new-hire, Boeing 727 flight engineer curriculum." Each curriculum consists of several curriculum segments.
- *Curriculum Segment:* The largest subdivision of a curriculum containing broadly related training subjects and activities based on regulatory requirements. Curriculum segments are logical subdivisions of a curriculum which can be separately evaluated and individually approved. Examples are a "ground training" segment and a "flight training" segment. Each curriculum segment consists of one or more training modules.

a separate module. A training module includes the outline, appropriate courseware, and the instructional delivery methods. It is usually, but not necessarily, completed in a single training session.

- *Element:* An integral part of a training, checking, or qualification module that is not task-oriented but subject-oriented. For example, an "electrical power" ground training module may include such elements as a DC power system, an AC power system, and circuit protection.
- *Event:* An integral part of a training, checking, or qualification module which is task-oriented and requires the use of a specific procedure or procedures. A training event provides a student an opportunity for instruction, demonstration, and/or practice using specific procedures. A checking or qualification event provides an evaluator the opportunity to evaluate a student's ability to correctly accomplish a specific task without instruction or supervision.
- *Checking and Qualification Module:* An integral part of a qualification curriculum segment which contains checking and qualification requirements specified under Part 121 or Part 135. For example, a qualification curriculum segment may contain a proficiency check module, a LOFT module and an operating experience (qualification) module.
- *Courseware:* Instructional material developed for each curriculum. This is information in lesson plans, instructor guides, computer software programs, audiovisual programs, workbooks, aircraft operating manuals, and handouts. Courseware must accurately reflect curriculum requirements, be effectively organized, and properly integrate with instructional delivery methods.

students as they demonstrate a required level of knowledge in a subject, and when appropriate apply the knowledge and skills learned in instructional situations to practical situations.

- *Training Hours:* The total amount of time necessary to complete the training required by a curriculum segment. This must provide an opportunity for instruction, demonstration, practice, and testing, as appropriate. This time must be specified in hours on the curriculum segment outline. A training hour includes time for normal breaks, usually 10 minutes each hour. Lunch breaks are not included.
- *Programmed Hours:* The hours specified in Part 121 for certain categories of training (initial new-hire, initial equipment, and recurrent). Programmed hours are specified in curriculum segment outlines in terms of training hours.
- *Duty Position:* The functional or operating position of a crewmember or aircraft dispatcher. For Parts 121 and 135 operations, duty positions are pilot-in-command (PIC), second-in-command (SIC), flight engineer (FE), flight attendant (FA), flight navigator (NAV), and aircraft dispatcher (AD).
- *Training/Checking Month (Base Month):* The calendar month during which a crewmember or aircraft dispatcher is due to receive required recurrent training, a required flight check, a required competency check, or required operating familiarization. Calendar month means the first day through the last day of a particular month.
- *Eligibility Period:* Three calendar months (the calendar month before the "training/checking month," the "training/checking month," and the calendar month after the "training/checking" month). During

personnel under a specific curriculum or curriculum segment pending an evaluation of training effectiveness. An initial approval letter must specify an expiration date for the conditional authorization.

- *Final Approval:* An FAA letter, without an expiration date, which authorizes an operator to continue training in accordance with a specific curriculum or curriculum segment.

**285. AIRCRAFT FAMILIES.** There are five basic families of aircraft used in Parts 121 and 135 operations. Aircraft are grouped into families according to their performance and flight characteristics to simplify development of training programs. The ground and flight training requirements for crewmembers are significantly different for each family of aircraft. Within each aircraft family, however, the ground and flight training requirements are similar, even though individual aircraft may be quite different in construction and appearance. The five families of aircraft are as follows:

- Transport category and commuter category airplanes
- Multiengine, turbopropeller and SFAR airplanes
- Multiengine, general-purpose airplanes
- Single-engine, general-purpose airplanes
- Helicopters

*A. Transport Category and Commuter Category Airplane Family.* The transport category and commuter category airplane family includes all airplanes certified under Part 25 (and predecessor rules such as CAR 4, 4A and 4B and SR 422, 422A, and 422B) and those few turbojet airplanes certified under Part 23. This family of airplanes also includes those few large airplanes of 30 or more passenger

airplanes or particular make and model have been determined to be equivalent to other models in a series. Airplanes of an equivalent series may be considered a single type for purposes of training and checking.

---

**FIGURE 3.2.1.1.A**  
**EQUIVALENT SERIES OF THE MULTIENGINE,  
TURBOPROPELLER, AND SFAR AIRPLANE FAMILY**

- Beechcraft Turbopropeller: B65-A90, 90, 99, 100, and 200
- Cessna Turbopropeller of the 400 series
- Piper Cheyenne Series
- Rockwell Commander Turbopropeller: 680T, 690V, 680W, and 690
- Fairchild SA 226-227 Series

---

*C. Multiengine, General-Purpose Airplane Family.* This aircraft family includes all multiengine airplanes certified for operations with 9 or less passenger seats and not more than 12,500 pounds maximum takeoff weight (MTOW). It does not include any airplanes certified in the transport or commuter category regardless of the MTOW. Crewmembers operating airplanes in this family must have similar knowledge, skills, and abilities to operate them under Part 135. For example, a pilot operating an airplane within this family may require diversified training in short and soft field landings, but is not required to have training in  $V_1$  cuts. This type of operation may require specific training, such as seaplane operations.

- Cessna: 336, 337
- Piper Reciprocating: PA-23, PA-30, PA-31, PA-34, and PA-39
- Rockwell Commander Reciprocating: 500, 560, 680, 685, and 720

---

D. *Single-Engine, General-Purpose Airplane Family.* This aircraft family includes all single-engine airplanes of not more than 12,500 pounds MTOW other than turbine-powered airplanes. Crewmembers operating airplanes in this family must have similar knowledge, skills, and abilities to operate them under Part 135. For example, pilots operating single-engine airplanes are required to have training that applies to all airplanes in this group, such as forced-landing procedures. The type of operation may require specific training, such as seaplane or skiplane training.

E. *Helicopter Family.* This aircraft family includes all helicopters. Helicopter operations under Part 135 require similar knowledge, skills, and abilities. General training requirements for this family of aircraft include such events as autorotation and anti-torque failure. The type of operation may require specific training in events such as high altitude landings or airborne radar approach (ARA) procedures.

**NOTE:** There are other types of aircraft such as single engine turboprop which do not fit in the five

in figure 3.2.1.1.C is representative only and is intended to present a framework for the modular development of a training program. By using this "modular approach," the POI has various strategies available for the evaluation of training effectiveness and for the planning of long-term surveillance. These strategies are discussed in section 2 of this chapter.

B. The illustration in figure 3.2.1.1.C consists of five parts as follows:

(1) Part A depicts representative components which, when combined, constitute an operator's overall training program. These components differ in that some must be specifically approved by the FAA (for example, courseware and check airmen), while others are accepted as essential supporting elements (for example, facilities and equipment).

(2) Part B illustrates the six categories of training that are recognized by the FAA.

(3) Part C is an example of a curriculum which is a complete agenda of training specific to an aircraft type and crewmember or dispatcher duty position. This example depicts a PIC B-727 transition training curriculum.

(4) Part D is an example of a specific curriculum segment and shows that it consists of several training modules. This example is the flight training curriculum segment of the PIC B-727 transition training curriculum.

(5) Part E is an example of a specific training module. In this case the module is simulator lesson number 4.



# CATEGORIES OF TRAINING

## CATEGORIES OF TRAINING

Initial New-Hire Training	Initial Equip. Training	Transition Training	Upgrade Training	Recurrent Training	Requalif. Training
<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> <li>o FE</li> <li>o FA</li> <li>o AD</li> </ul>	<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> <li>o FE</li> <li>o FA</li> <li>o AD</li> </ul>	<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> <li>o FE</li> <li>o FA</li> <li>o AD</li> </ul>	<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> </ul>	<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> <li>o FE</li> <li>o FA</li> <li>o AD</li> </ul>	<ul style="list-style-type: none"> <li>o PIC</li> <li>o SIC</li> <li>o FE</li> <li>o FA</li> <li>o AD</li> </ul>

PART B

## AN EXAMPLE OF A CURRICULUM

### PIC B727 TRANSITION TRAINING CURRICULUM

- o Ground Training
- o **Flight Training**
- o Emergency Training
- o Differences Training
- o Qualification Requirements

Curriculum  
Segments  
Within a  
Curriculum

PART C

## AN EXAMPLE OF A CURRICULUM SEGMENT (time is exemplary only)

### PIC B727 TRANSITION FLIGHT TRAINING

HOURS: 24

- o CPT/Checklist Review
- o Simulator No. 1 — Normal
- o Simulator No. 2 — Procedures
- o Simulator No. 3 —
- o **Simulator No. 4** — Abnormal/
- o Simulator No. 5 — Emergency
- o Simulator No. 6 — Procedures
- o Simulator No. 7 - Review/Recommend
- o Simulator No. 8 - Rating
- o A/C No. 1 - Normal/Abnormal/Emergency Procedures
- o A/C No. 2 - Rating

Training  
Modules  
Within a  
Curriculum  
Segment

PART D

## AN EXAMPLE OF A TRAINING MODULE

### SIMULATOR NO. 4: ABNORMAL/EMERGENCY PROCEDURES

- o Engine Failure/Fire
- o Runaway Trim
- o No Flap/No Slat Landing
- o V<sub>1</sub> Cuts
- o Rapid Decompression/Emergency Descent

Events  
Within a  
Training  
Module

PART E

organized according to specific categories of training. When discussing training requirements, FAA inspectors should be specific regarding the category of training being discussed and use the nomenclature described in this handbook. POI's should encourage operators to use this nomenclature when developing new training curriculums or revising existing training curriculums. Use of this common nomenclature improves standardization and mutual understanding. The six categories of training are briefly discussed in the following subparagraphs:

A. *Initial New-Hire Training.* This training category is for personnel who have not had previous experience with the operator (newly-hired personnel). It also applies, however, to personnel employed by the operator who have not previously held a crewmember or dispatcher duty position with that operator. Initial new-hire training includes basic indoctrination training and training for a specific duty position and aircraft type. Except for a basic indoctrination curriculum segment, the regulatory requirements for "initial new-hire" and "initial equipment" training are the same. Since initial new-hire training is usually the employee's first exposure to specific company methods, systems, and procedures, it must be the most comprehensive of the six categories of training. For this reason, initial new-hire training is a distinct separate category of training and should not be confused with initial equipment training. As defined by this handbook, initial equipment training is a separate category of training.

B. *Initial Equipment Training.* This category of training is for personnel who have been previously trained and qualified for a duty position by the operator (not new-hires) and who are being reassigned for any of the following reasons:

(1) For Part 121 operations, the crewmember is being reassigned in one of the following circumstances:

(2) For Part 135 operations, the crewmember is being reassigned in one of the following circumstances:

(a) Reassignment is to a different duty position on a different aircraft type and the crewmember has not been previously trained and qualified by the operator for that duty position and aircraft type.

(b) Reassignment is to an aircraft of a category or class for which the crewmember has not previously qualified with that operator.

C. *Transition Training.* This category of training is for an employee who has been previously trained and qualified for a specific duty position by the operator and who is being assigned to the same duty position on a different aircraft type. For Part 121 operations, the different type aircraft must be in the same group. If it is not in the same group, initial equipment training is the applicable category of training.

D. *Upgrade Training.* This category of training is for an employee who has been previously trained and qualified as either SIC or FE by the operator and is being assigned as either PIC or SIC, respectively, to the same aircraft type for which the employee was previously trained and qualified.

E. *Recurrent Training.* This category of training is for an employee who has been trained and qualified by the operator, who will continue to serve in the same duty position and aircraft type, and who must receive recurring training and/or checking within an appropriate eligibility period to maintain currency.

F. *Requalification Training.* This category of training is for an employee who has been trained and qualified by the operator, but has become unqualified to serve in a particular duty position and/or aircraft due to not having received

the same aircraft type, provided they were previously qualified as FE's on that aircraft type

G. *Summary of Categories of Training.* The categories of training are summarized in general terms as follows:

(1) All personnel not previously employed by the operator must complete *initial new-hire training*.

(2) All personnel must complete *recurrent training* for

operator to a different duty position and/or aircraft type must complete either *initial equipment, transition, upgrade, or requalification training*, depending on the aircraft type and duty position for which they were previously qualified. Tables 3.2.1.1. and 3.2.1.2. summarize these categories of training for Part 121 and Part 135 respectively. These tables indicate the appropriate category of training for normal crewmember progression or reassignment. They may not address certain situations. The guidance in this paragraph and the requirements of appropriate regulations must be followed when the tables do not address such situations.

This table illustrates categories of training for personnel being assigned to either a different duty position, a different airplane type, or a different airplane group with the same Part 121 operator.

ASSIGNED DUTY POSITION

	PIC 1A	PIC 1B	PIC 2A	PIC 2B	SIC 1A	SIC 1B	SIC 2A	SIC 2B	FE 1A	FE 1B	FE 2A	FE 2B	FA 1A	FA 1B	FA 2A	FA 2B	AD 1A	AD 1B
C																		
U	R*	T	I	I	R	I	I	I	R/I	I	I	I	-	-	-	-	-	-
R	T	R*	I	I	I	R	I	I	I	R/I	I	I	-	-	-	-	-	-
R	I	I	R*	T	I	I	R	I	I	I	R/I	I	-	-	-	-	-	-
E	I	I	T	R*	I	I	I	R	I	I	I	R/I	-	-	-	-	-	-
N	U	I	I	I	R*	T	I	I	R/I	I	I	I	-	-	-	-	-	-
T	I	U	I	I	T	I	I	I	R/I	I	I	I	-	-	-	-	-	-
	I	I	U	I	I	I	I	I	I	R/I	I	I	-	-	-	-	-	-
D	I	I	I	U	I	I	R*	T	I	I	I	R/I	-	-	-	-	-	-
U	I	I	I	I	I	I	I	R*	I	I	I	R/I	-	-	-	-	-	-
T	I	I	I	I	U	I	I	I	R*	T	I	I	-	-	-	-	-	-
Y	I	I	I	I	I	U	I	I	T	R*	I	I	-	-	-	-	-	-
	I	I	I	I	I	I	U	I	I	I	R*	T	-	-	-	-	-	-
P	I	I	I	I	I	I	I	U	I	I	T	R*	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-	R*	T	I	I	-	-
O	-	-	-	-	-	-	-	-	-	-	-	-	T	R*	I	I	-	-
S	-	-	-	-	-	-	-	-	-	-	-	-	I	I	R*	T	-	-
I	-	-	-	-	-	-	-	-	-	-	-	-	I	I	T	R*	-	-
T	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	R*	T
I	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	T	R*
O	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I	I
N	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	I	I

Required Categories of Training: I = Initial Equipment Training, T = Transition Training, U = Upgrade Training, R = Requalification Training, R\* = Requalification Training required if person has become unqualified, R/I = Requalification Training required if previously qualified for the duty position or Initial Equipment Training required if not previously qualified for the duty position.

TABLE KEY:

PIC = Pilot-in-Command  
 SIC = Second-in-Command  
 FE = Flight Engineer  
 PA = Flight Attendant  
 AD = Aircraft Dispatcher

1 = Group I (Reciprocating- or turbopropeller-powered airplanes)  
 2 = Group II (Turbojet-powered airplanes)  
 A = A specific airplane type (different from B)  
 B = A specific airplane type (different from A)

EXAMPLES:

1. Current duty position is SIC on airplane type B, a Group I airplane. Upgrade training required if not previously qualified for the duty position.
2. Current duty position is SIC on airplane type B, a Group II airplane. Upgrade training required if not previously qualified for the duty position.

assigned to either a different duty position and/or a different aircraft type with the same Part 135 operator.

#### ASSIGNED DUTY POSITION

	PIC(A)	PIC(B)	SIC(A)	SIC(B)	F/A(A)	F/A(B)	
CURRENT DUTY POSITION	PIC A	R*	T	R	I	-	-
	PIC B	T	R*	I	R	-	-
	SIC A	U	I	R*	T	-	-
	SIC B	I	U	T	R*	-	-
	FA A	-	-	-	-	R*	T
	FA B	-	-	-	-	T	R*
	Required Categories of Training: I = Initial Equipment Training T = Transition Training U = Upgrade Training R = Regualification Training R* = Regualification required if person has become unqualified						

#### TABLE KEY:

PIC = Pilot-in-Command

SIC = Second-in-Command

FA = Flight Attendant

(A) = A specific aircraft type  
(different from B)

(B) = A specific aircraft type  
(different from A)

#### EXAMPLE:

1. Current duty position is SIC on aircraft type A. Person is assigned to PIC duty position on same aircraft type. Upgrade Training is required.

been previously qualified as a crewmember by that operator. Abbreviated curriculum segment outlines of initial new-hire training may apply to merger or air carrier acquisition situations (see volume 2, chapter 3, section 1).

**293. CURRICULUM DEVELOPMENT.** Operators must develop one or more curriculums for each category, specific duty position, and aircraft type in which the operator conducts training.

**A. Required Curriculums.** The operator is required to develop and maintain only those curriculums that will be used. For example, if an operator specifies that all newly hired pilots must be trained first as B-727 FE's, the appropriate curriculum for that category of training would be B-727 FE initial new-hire training. The operator would not be required to develop any initial new-hire pilot training curriculums for other aircraft or duty positions. Another example would be if a Part 135 operator specifies that all newly hired pilots must be trained first as SIC's on the BE-99, then only a BE-99 SIC initial new-hire training curriculum would need to be developed and maintained.

**B. Types of Single-Engine, General-Purpose Airplanes.** A Part 135 operator may consider all makes and models of airplanes of the single-engine, general-purpose family (except turbine-powered airplanes) as a single "type" when determining the need to construct a curriculum (see paragraph 285 of this chapter).

**C. Types of Multiengine, General-Purpose Airplanes.** A Part 135 operator may consider all multiengine, general-purpose airplanes or turbopropeller and SFAR airplanes of an equivalent series as an airplane "type" when determining the need to construct a curriculum (see paragraph 285 of this chapter). Operators must provide differences training to qualify crewmembers in different models of aircraft considered the same "type" for this purpose.

**D. Types of Transport Category, Commuter Category, and**

may develop and have multiple curriculums approved for any single duty position and aircraft type. For example, an operator may have one initial new-hire curriculum approved for pilots with minimum hours and without any previous revenue experience. A second curriculum could then be approved for pilots previously qualified in service in the type of aircraft for which training is being conducted. Operators that develop multiple curriculums must carefully specify the qualifications of students in each curriculum. Some acceptable means that operators may use include the following:

- Documentation such as training records from previous employers showing the extent and scope of previous training
- Validated pretesting

**F. Curriculum Outlines.** Curriculum outlines are documents used by operators to specify the curriculum content. Outlines must contain at least the information specified in paragraph 319 of this chapter. This information is required so that the POI can determine whether the operator's curriculum meets regulatory requirements during phase three of the approval process (see paragraph 327 of this chapter). Curriculum outlines should contain enough detail so that lesson plans can later be constructed from them. Other information is not necessary, and POI's should discourage operators from including it. Detailed information should be placed in lesson plans, training manuals, and other documents maintained by the operator. This material is reviewed during phase four of the approval process (see paragraph 337 of this chapter).

**G. Completion Requirements.** Each person required to train under a curriculum must complete that curriculum in its entirety. Each student must satisfactorily complete all curriculum segments prescribed by an approved training curriculum. When a person has completed the training and checking specified by a curriculum, that person is qualified to serve in a specific duty position on a specific aircraft type.

- Basic Indoctrination - FAR 121.415(a)(1) or FAR 135.329(a)(1)
- Aircraft Ground Training - FAR 121.419 through 121.422 or FAR 135.329(a)(2)

- Qualification Segment - FAR 121, Subpart O, or 135.293 through 135.299

[illegible]

- \* A proficiency check may be substituted for the recurrent flight training curriculum segment (see volume 3, chapter 2, section 11).
- \*\*\* The curriculum segments for requalification training depends upon the period of time the crewmember/dispatcher has been unqualified (see volume 3, chapter 2, section 11).



---

(1) *Example of related "elements" in an aircraft ground training module outline:*

Electrical System —————> *TITLE OF TRAINING MODULE*

- Systems Overview
  - AC Power
  - DC Power
  - Standby Power
  - AMU Generator
  - External Power
  - Power Distribution
  - Circuit Protection
  - Controls and Indicators
  - Limitations
  - Normal Procedures
  - Abnormal and Emergency Procedures
- ELEMENTS  
WITHIN A  
TRAINING  
MODULE*

---

(2) *Example of related "events" in a flight training module outline:*

1st Simulator Period —————> *TITLE OF TRAINING MODULE*

- Use of Checklist
  - Engine Starts and Powerplants Checks
  - Taxi
  - Normal Takeoffs
  - Area Departure
  - Holding Patterns
  - Descent and Area Arrival
  - IFS Approaches (all engines)
  - Normal Landings
- EVENTS  
WITHIN A  
TRAINING  
MODULE*

---

B. Operators must construct training module outlines with enough detail to ensure that the POI can identify that the essential features of the subject have been addressed and that regulatory requirements have been met. The training module outline will later serve as a foundation from which the operator will develop complete and usable courseware and select appropriate instructional delivery

methods. The effectiveness of courseware and instructional delivery methods cannot be evaluated before instruction begins and must, therefore, be evaluated as a final step in the approval process. Excessive detail is neither necessary nor helpful to the POI during the initial approval process.

(1) In the development of a training module, the

when new elements are introduced. For example, existing training outlines require the addition of a Traffic Alert and Collision Avoidance System (TCAS) and operations modules with the introduction of TCAS.

(3) One reason for excluding excessive detail from the training module outline is to allow the operator flexibility in adjusting courseware without time-consuming and unnecessary reviews on the part of the POI. During the final approval process and beyond, the operator is free to make adjustments determined necessary on the basis of experience to courseware that does not add or delete elements or events from the outline. POI's may also find it necessary, on the basis of surveillance reports or other information, to require the operator to modify courseware and course outlines.

C. Curriculum segments are composed of training modules. The scope and content of each training module depends upon the category of training and the curriculum in which the curriculum segment is to be incorporated. The number and content of modules for a particular curriculum segment may vary from one category of training to another. For example, aircraft ground training modules

D. A single module may be used in more than one curriculum and in more than one category of training. For example, a module which specifies a review of emergency evacuation procedures for recurrent training could be the same for requalification training. POI's should, however, encourage operators to develop courseware which places emphasis on the particular category of training. For example, PIC upgrade training should emphasize duty position responsibilities. The emphasis in SIC upgrade training (FE to SIC), however, should be on piloting skills as well as on the requirements of the new duty position. Transition training should emphasize aircraft systems and the procedures and piloting skills needed to operate a different aircraft type. In many cases, operators may develop different sets of courseware from a single outline to cover differences in emphasis.

E. Checking and qualification curriculum modules consist of those events required by regulation to act in revenue service without supervision.

**299. DELETED.**

**300. - 310. RESERVED.**

**[PAGES 3-171 THROUGH 3-174 RESERVED]**

curriculum segment is composed of those testing, checking, and experience modules that a flight crewmember must successfully complete after formal training has been completed and before being qualified to serve unsupervised as a required flight crewmember in Part 121 or Part 135 operations.

A. A qualification curriculum segment has the following primary objectives:

- To ensure that each flight crewmember has reached an acceptable level of proficiency in all assigned duties before being released from training and supervision
- To provide a means for measuring the effectiveness of the training program and for identifying and correcting training deficiencies

B. The guidance in this section applies to the development and approval of qualification curriculum segments for both Parts 121 and 135 training curriculums. In general, equivalent qualification modules are required by both of these regulatory parts. Differences do exist, however, between Part 121 and Part 135 curriculum segments in both terminology and details. When the guidance in this section applies specifically to one flightcrew duty position or regulatory part, the duty position or regulatory part will be specified.

**525. TYPES OF QUALIFICATION MODULES.** Qualification curriculum segments are composed of qualification modules. Qualification modules are generally divided into testing, checking, and experience modules.

A. *Definitions.* The following definitions are used in this section:

- *Qualification Curriculum Segment:* That segment of a specified curriculum that begins when formal

of skill, whether oral, written, or practical

- *Checking:* Specifically, a practical skills test (For flight crewmembers, a check consists of physical manipulation of aircraft controls in real time.)
- *Basic Checking Module:* The proficiency or competency check listed in a qualification segment of a curriculum outline required for qualification in the basic duties of an airman position
- *Additional Checking Module:* A check conducted to qualify an airman for an additional level of responsibility or skill, beyond that of the basic crew position
- *Experience Module:* An operation conducted in revenue service that is either under supervision or under restriction, and is measured in flight hours or in the number of repetitions of an event
- *Line-Oriented Flight Training (LOFT):* Line-oriented flight training (LOFT) is a module of training conducted in a simulator after completion of a basic checking module to satisfy the requirements of Part 121, Appendix H.

B. *Experience Modules.* The FAR's require that experience modules be completed before a crewmember may perform unsupervised and without restriction in revenue service. Other experience modules are required for special authorizations or to re-establish currency. One or more of the following experience modules may be required in a qualification curriculum segment:

- Operating experience (OE)

**527. FORMAT OF QUALIFICATION CURRICULUM SEGMENTS.** The content of a qualification curriculum segment for Part 121 operations is almost entirely controlled by regulation. A Part 121 operator may, however, use more than one means of accomplishing these requirements. For example, an operator could conduct checks for most categories of training in a C-level simulator. In such a case, the operator would be required to conduct a LOFT training module after the completion of the basic checking module. An operator that uses an A-level simulator would be required to conduct the basic checking module in the simulator and a second module in the airplane. The requirements of a Part 135 competency check are not specified in the FAR's, but are left to the discretion of the Administrator and the check airman conducting the check. To ensure that a clear understanding exists between the operator and the FAA, the POI should require that the operator list each element or event in a qualification module along with the device to be used. The operator's format may either be a simple outline, a table such as those contained in figures 3.2.7.3. and 3.2.7.4., or any other format that the POI finds clearly establishes the methods to be used and elements and events to be checked.

**529. PART 121 REQUIRED CERTIFICATES.** All flight crewmembers must hold specific certificates and ratings before performing duties in Part 121 revenue service. If a flight crewmember does not hold the required certificates and/or ratings, they must be obtained when the flight crewmember completes the qualification curriculum segment.

A. A PIC in Part 121 operations must hold the following:

- Airline transport pilot (ATP) certificate
- Airplane category rating

- Commercial pilot certificate (or ATP certificate)
- Instrument rating (or ATP certificate)
- Airplane category rating
- Appropriate class rating
- At least a second class medical certificate

C. A flight engineer (FE) must hold the following:

- Flight engineer certificate
- Applicable class rating
- At least a second class medical certificate

**531. PART 135 REQUIRED CERTIFICATES.** All pilots must hold specific certificates and ratings before performing duties in Part 135 revenue service. If a pilot does not hold the required certificates and/or ratings, they must be obtained when the pilot completes the qualification curriculum segment.

A. *Pilot Certification Requirements - Airplanes.* The pilot certification requirements for Part 135 airplane operations depend on the kind and type of operation being conducted and the types of aircraft used.

(1) PIC's conducting passenger-carrying operations using either a turbojet airplane or any airplane having 10 or more passenger seats (excluding any pilot seat), or PIC's conducting a commuter operation using a multiengine airplane, must hold the following:

- ATP certificate

(2) PIC's conducting Part 135 flight operations in airplanes other than those described in subparagraph 529 A(1), must hold the following:

- Commercial pilot certificate (or ATP certificate)
- Instrument rating (or ATP certificate)
- Airplane category rating
- Appropriate class ratings
- Type rating (for all airplanes over 12,500 pounds and turbojet airplanes)
- At least a second class medical certificate

(3) SIC's conducting any Part 135 airplane operations must hold the following:

- Commercial pilot certificate (or ATP certificate)
- Instrument rating (or ATP certificate)
- Airplane category rating
- Applicable class rating
- At least a second class medical certificate

(4) Pilots conducting Part 135, VFR-only operations in isolated areas with single-engine, reciprocating-powered airplanes may be relieved of the requirement to hold an instrument rating when authorized by paragraph A20 of the operations specifications (OpSpecs). (These operations are subject to the restrictions of FAR 135.243(d).)

certificate)

- Rotorcraft category rating
- Helicopter class rating
- At least a second class medical certificate

(2) All PIC's must hold a type rating, if a type rating is required.

(3) PIC's conducting Part 135 IFR or VFR over-the-top operations in helicopters must hold a helicopter instrument rating or an ATP certificate that is not limited to VFR.

**533. PART 135 MINIMUM PIC FLIGHT EXPERIENCE REQUIREMENTS.** FAR 135.243(b) and (c) require that a PIC who does not hold an ATP certificate and who conducts operations that do not require an ATP certificate, must have acquired a minimum number of flight hours before serving as a PIC.

A. Before serving as a PIC in a VFR operation, the pilot must have accumulated at least the following flight hour experience:

- 500 total pilot flight hours
- 100 cross-country flight hours
- 25 night, cross-country flight hours

B. Before serving as a PIC in an IFR operation, the pilot must have accumulated at least the following flight hour experience:

- 1,200 total pilot flight hours
- 500 cross-country flight hours

**535. THE BASIC CHECKING MODULE.** The basic checking modules for both Parts 121 and 135 are composed of two parts. One part consists of the written or oral test elements and the other part consists of the flight check events. Although they are distinct and separate parts, when combined they make up a single checking module.

**A. Basic Checking Module Content.** The subject areas that must be addressed in the written or oral test for the Part 121 basic checking module are described in Appendix F of Part 121. The subject areas that must be addressed

operations, a higher standard of proficiency may be required than that required for initial pilot certification. The standard required for basic checks is at least that required for obtaining the certificate which must be held to act as PIC. For example, an SIC holding a commercial certificate with an instrument rating who is making an ILS approach in a DC-10 must perform to the same standard of proficiency as the PIC seated in the left seat who holds an ATP certificate and a DC-10 type rating. POI's should ensure that the following guidance pertaining to proficiency and competency checks in volume 5 of this handbook is brought to the operator's and check airman's attention:

PARAGRAPH NUMBER(S)	SUBPARAGRAPH NUMBER(S)
13	B through D
15, 31, and 33	All
77	A through D
109	C through H
111 - 122, 129 - 144, 147 - 170, 173, 177 - 194, 241, and 249 - 268	All

**C. Use of Simulators.** An operator may take maximum advantage of simulators and training devices in designing qualification curriculum segments. For example, an operator may evaluate a PIC and an SIC simultaneously on many normal, nonnormal, and emergency procedures when a simulator is used. POI's should encourage operators to design qualification modules accordingly.

**D. LOFT Training.** A LOFT training module is considered to be part of the qualification curriculum segment, but is an experience event, not a checking event. A pilot who qualifies for a certificate or rating in a C- or D-level simulator is issued the certificate or rating immediately after satisfactorily completing the basic check. The

pilot is not qualified to either exercise the privileges of the certificate or rating, or enter revenue service until the pilot has successfully completed the LOFT training module.

**537. PART 121 BASIC CHECKING MODULE.** The basic checking module required in Part 121 is referred to as a proficiency check. For pilots, a proficiency check consists of the written or oral test elements and the flight test events specified in Appendix F of Part 121. The elements and events that make up a proficiency check are summarized in figure 3.2.7.1. A proficiency check qualifies pilots for both VFR and IFR Class I navigation and instrument approaches to standard minimums (CAT I, if approved for the operator). Operations such as CAT II or CAT III approaches



- Taxiing ..... Both 1
- Powerplant checks ..... Both 1

## TAKEOFFS

- Normal ..... Both
- Instrument ..... Both
- Crosswind ..... Both
- With powerplant failure ..... Both
- Rejected takeoff ..... Both\*1

## INSTRUMENT PROCEDURES

- Area departure ..... Both\*
- Area arrival ..... Both\*
- Holding ..... Both\*
- Normal ILS approach ..... Both
- Engine-out ILS ..... Both
- Coupled ILS approach ..... Both1
- Nonprecision approach ..... Both
- Second nonprecision approach ..... Both
- Missed approach from an ILS ..... Both
- Second missed approach ..... PIC
- Circling approach ..... Both\*2

## IN-FLIGHT MANEUVERS

- Steep turns ..... PIC\*
- Specific flight characteristics ..... Both5
- Approaches to stalls ..... Both\*
- Powerplant failure ..... Both
- 2-engine inoperative approach ..... Both
- (3- and 4-engine aircraft)
- Normal landing ..... Both
- Landing from an ILS ..... Both
- Crosswind landing ..... Both
- Landing with engine-out ..... Both
- Landing from circling approach ..... Both\*2



**OTHER EVENTS** ..... At Check Airman's Discretion\*4

**NOTES:**

**"Both":** The term "Both" applies to PIC's and SIC's

\* May be waived under certain conditions (see volume 5, paragraph 79.)

- 1 PIC and SIC may both simultaneously take credit for this event
- 2 When the operator is authorized to conduct circling approaches according to paragraph 53 of the OpSpecs  
(This is not required for SIC's if the operator's manual prohibits SIC's from making this approach.)
- 3 See guidance contained in volume 5, paragraph 87(D) and 89(G)
- 4 The check airman is authorized to evaluate any event required for the ATP certificate (see volume 5,  
paragraph 33)

- Interior preflight
- Panel set-up
- Fuel load
- Engine start procedures
- Taxi and before takeoff procedures
- Takeoff and climb
- Pressurization
- Cruise and fuel management
- Descent and approach
- After landing and securing
- Crew coordination
- Situational awareness, traffic scan, etc.
- Performance computations
- Anti-ice, deice

### **NONNORMAL AND EMERGENCY PROCEDURES**

Sample as many nonnormal and emergency procedures as needed to evaluate performance:

- Trouble-shooting
- Knowledge of checklist
- Ability to perform procedures
- Crew coordination
- Minimum equipment list (MEL) and configuration deviation list (CDL)

tions must include a demonstration of these skills in the basic checking module. This paragraph contains guidance to be used by POI's for the review and approval of basic checking modules and for the conduct of these checks.

*A. FAR 135.293 Requirements.* All pilots who are qualifying in an aircraft type are required by FAR 135.293 to complete a check in that type of aircraft before entering revenue service and annually thereafter. FAR 135.293(b) allows the Administrator to define airplanes with similar characteristics as a single type for purposes of this rule (see paragraph 285 for aircraft of the equivalent series which are defined as a single type). The rule refers to this check as a competency check. The requirements of FAR 135.293 are aircraft specific; that is, each pilot must satisfactorily complete a competency check in each type of aircraft (as defined in paragraph 285) prior to operating that aircraft in revenue service. FAR 135.293 does not specify the maneuvers (events) which must be accomplished on a competency check. The rule authorizes the Administrator or check airman to make this determination. To ensure standardization and an adequate level of safety, the minimum acceptable content of competency checks for a Part 135 curriculum is established by this paragraph and is listed in figures 3.2.7.3. and 3.2.7.4. Since operators may be authorized to conduct VFR-only operations or a combination of VFR and IFR operations, separate requirements have been established for VFR-only competency checks and for combined VFR and IFR operations competency checks. These requirements are indicated in columns marked "VFR COMP" and "IFR COMP" on each figure. As a matter of national safety policy, however, some demonstration of competency of the pilot's ability to maneuver the aircraft solely by reference to instruments will be included on each competency check. For VFR competency checks, this demonstration will be appropriate to the aircraft's installed equipment and the operating environment (see note 7 to figure 3.2.7.3. and note 4 to figure 3.2.7.4.).

according to FAR 135.293. FAR 135.293(c) specifies that the check conducted to satisfy FAR 135.297 simultaneously satisfies the requirements of FAR 135.293 for the type of aircraft in which the check is accomplished.

**NOTE: The oral or written test requirements of 135.293(a) must be completed.**

(1) *Operations Requiring ATP Certificates.* FAR 135.297(c)(1) requires that for operations requiring an ATP certificate, the instrument-proficiency check must consist of the maneuvers required for original issuance of that certificate and any applicable type rating.

(2) *Operations Requiring Commercial Certificates.* FAR 135.297(c)(1) also requires that for operations requiring a commercial certificate and an instrument rating, the instrument-proficiency check must consist of the maneuvers required for the original issuance of a commercial certificate, an instrument rating, and any applicable type rating.

*C. Basic Checking Modules for FAR 135.293 VFR Competency Check.* The minimum events for a FAR 135.293 VFR competency check are listed in the columns marked "VFR COMP" in figure 3.2.7.3. for airplanes and in figure 3.2.7.4. for helicopters.

*D. Basic Checking Modules for FAR 135.293 IFR Competency Check.* The minimum events for a FAR 135.293 IFR competency check are listed in the column marked "IFR COMP" in figure 3.2.7.3. for airplanes and in figure 3.2.7.4. for helicopters.

(1) *PIC Requirements.* PIC's being trained in Initial Equipment and Transition Curricula for IFR operations have normally completed the requirements of FAR 135.297 within the preceding 6 months. If this is the case, the qualification module for these categories of training need only satisfy the requirements of FAR 135.293. The columns

checking. Table 3.2.7.3. has been constructed on the assumption that pilots in the transition category are qualifying in airplanes which are not of the same series. The basic qualification module of a transition training course for airplanes of the same series of the multiengine general purpose family of airplanes consists of the oral or written test required by FAR 135.293(a)(2).

(3) *Single Engine, General Purpose Family.* All single engine general purpose airplanes are considered to be a single type for the purpose of training and checking. The qualification module of the transition category of training is the written or oral test required by FAR 135.293(a)(2).

E. *Requalification Category.* The minimum events of the requalification checking module are dependent upon whether the pilot is requalifying for VFR or IFR operations and the duty position. PIC's who conduct IFR operations and have completed a FAR 135.297 check in the past 6 months but are overdue for a check required by FAR 135.293 may regain qualification by completing the items listed in the columns marked "IFR COMP" in figures 3.2.7.3. for airplanes and 3.2.7.4. for helicopters. PIC's overdue in respect to the requirements of FAR 135.297 must complete the items listed in the columns marked "INST PROF" in figures 3.2.7.3. for airplanes and 3.2.7.4. for helicopters.

F. *Recurrent Category.* The minimum events of the Recurrent checking module are dependent upon whether the pilot is maintaining currency for VFR or IFR operations and the duty position. PIC's who conduct IFR

PIC's to complete instrument-proficiency checks by rotating aircraft types. When one airplane is a multiengine airplane and the other a single engine airplane, FAR 135.297(f) requires that this rotation begin with the multiengine airplane.

**NOTE: FAR 135.301 allows airmen and operators to consider a check conducted in the month before due or the month after due to have been accomplished in the month due.**

G. *SIC Qualification in Aircraft Not Requiring an SIC.* The basic qualification module for an SIC in any operation (VFR or IFR) for which no SIC is required by regulation is either an instrument-proficiency or VFR competency check in any aircraft of the same category and class and the written or oral test required by FAR 135.293(a)(2) for the type of aircraft involved.

H. *Listing Module Events.* To ensure that the content of the basic checking module is adequate and appropriate, the operator may choose (or the POI may require) that the minimum required events of each basic checking module be listed on the curriculum outline.

I. *Recording Checks.* The checks for those operators whose flightcrew members get all their checks from FAA inspectors (single pilot, single PIC, and basic operators) may be recorded on FAA FORM 8410-3. POI's should encourage all other operators to create specifically tailored forms to record these checks which reflect the requirements listed in the operator's curriculum outline.

<b>GROUND OPERATIONS</b> Preflight Inspection	B	B	P	#
Start Procedures	B	B	P	#
Taxiing	B	B	P	#
Pretakeoff checks	B	B	P	#
<b>TAKEOFFS AND DEPARTURES</b> Normal	B	B	P	
Crosswind	B	B	P	1
Instrument		P	P	2
With powerplant failure	B	B	P	ME Only
Rejected takeoff	P	P	P	3, ME Only
Short field	P	P	P **	SE Only
Area departure			P *	
<b>IN-FLIGHT MANEUVERS</b> Steep turns	P **	P **	P **	
Approaches to stalls	B	B	P	10
Powerplant failure	P	P	P	
2-engine inop. approach	P	P	P	3 & 4 Eng. Aircraft
<b>INSTRUMENT PROCEDURES</b> Area arrival			P *	
Holding			P **	
Normal ILS approach		B	P	4, 8
Engine-out ILS		P	P	8, ME Only
Coupled approach		P	P	4, 8
Nonprecision approach		B	P	11
Second nonprecision approach			P	11
Missed approach from an ILS			P	
Second missed approach			P	
Circling approach			P	13

Crosswind	B	B	P	5
Landing from an ILS			P	
Landing with engine-out	B	B	P	ME Only
Circling approach			P	13
Rejected landing			P	
2-engine inop. landing	P	P	P	3 & 4 Eng. Aircraft
Short Field landing	P	P	P	SE Only
No Flap approach	P	P	P	6, 14
<b>SEA &amp; SKI OPERATIONS</b> (If applicable)				
Normal TO & Landing	B	B	P	
Step Turns	P **	P **	P **	
Glassy & Rough Water	P **	P **	P **	
Sailing	P **	P **	P **	
Docking	P **	P **	P **	
<b>NONNORMAL AND EMERGENCY PROCEDURES</b>				
System Malfunctions	B	B	P	#
Maneuver by Partial Panel	B	B	P	9
Unusual attitude Rec.	B	B	P	
Emergency Landing	B	B	P	SE Only
Instrument Approach	B			7

- \*\*** May be waived at the discretion of the POI and the check airman when the check is not conducted in conjunction with initial new-hire or initial equipment training.
- 1** See volume 5, paragraph 83 E.
  - 2** See volume 5, paragraph 83 B.
  - 3** See volume 5, paragraph 83 D.
  - 4** The applicant must demonstrate the ability to use all installed equipment including autopilots and flight directors. In multiengine airplanes, an engine out ILS may be substituted for the normal ILS at the option of the inspector or check airman administering the check.
  - 5** See volume 5, paragraph 89 B.
  - 6** See volume 5, paragraph 87 E and paragraph 89 H.
  - 7** POI's shall ensure applicants accomplish this event in an aircraft the operator uses in revenue operations (or in an appropriately equipped simulator or training device.) The event should reflect a realistic course of action the pilot might take to escape from an inadvertent encounter with IFR conditions. POI's should approve methods appropriate to the aircraft, equipment, and facilities available. When the pilot is authorized to operate an appropriately equipped aircraft and the check is conducted at a location where an ILS is operational, an ILS approach should be demonstrated. POI's may also approve a letdown on partial panel when this would be an appropriate course of action.
  - 8** See volume 5, paragraph 87 A.
  - 9** Airplanes not having standby instrumentation.
  - 10** See volume 5, paragraph 85 D.
  - 11** See volume 5, paragraph 87. Any two nonprecision approaches authorized by the OpSpecs may be accomplished at the discretion of the inspector or check airman conducting the check.
  - 12** See volume 5, paragraph 89.
  - 13** SIC's need not be evaluated in circling approaches when the operators procedures restrict SIC's from conducting this event in revenue service.
  - 14** Required only for transport, commuter, turboprop, and SFAR aircraft families as described in volume 3, paragraph 285.

FAR 135.293	B	B		
<b>GROUND OPERATIONS</b>				
Preflight Inspection	B	B	P	#
Start Procedures	B	B	P	#
Taxiing and Ground Hover	B	B	P	#
Pretakeoff checks	B	B	P	#
<b>TAKEOFFS AND DEPARTURES</b>				
Normal	B	B	P	
Instrument		P	P	1
With powerplant failure	B	B	P	ME Only
Emergency Deceleration	P	P	P	2
Area departure			p **	
<b>IN-FLIGHT MANEUVERS</b>				
Steep Turns			p **	
Settling with power	B	B	P	
Unusual Attitude Recovery	B	B	P	
<b>INSTRUMENT PROCEDURES</b>				
Area arrival			p **	
Holding			p **	
Normal ILS approach		B	P	3, 5
Engine-out ILS		P	P	5, ME Only
Coupled approach		P	P	3, 5
Nonprecision approach		B	P	7
Second nonprecision approach			P	7
Missed approach from an ILS			P	
Second missed approach			P	
Circling approach			P	9



Landing from an ILS			P	
Landing with engine-out	B	B	P	ME Only
Circling approach			P	9
<b>SEA OPERATION</b> (If applicable) Normal TO & Landing	B	B	P	
<b>NONNORMAL AND EMERGENCY PROCEDURES</b> System Malfunctions	B	B	P	#
Maneuver by Partial Panel	B	B	P	6
Instrument Approach	B	B	P	
Power failure and Autorotation to a power recovery	B	B	P	SE Only
Hovering Autorotations	B	B	P	4
Tail Rotor Failure	B	B	P	Oral Only
Dynamic Rollover	B	B	P	Oral Only
Low Rotor RPM	B	B	P	Oral Only
Anti-Torque System Failure	B	B	P	Oral Only
Confined Area/Pinnacle Operations	P		P	
Slope Operations	P		P	

- 3 The applicant must demonstrate the ability to use all installed equipment including autopilots and flight directors. In multiengine helicopters, an engine out ILS may be substituted for the normal ILS at the option of the inspector or check airman administering the check.
- 4 POI's shall ensure applicants accomplish this event in an aircraft the operator uses in revenue operations (or in an appropriately equipped simulator or training device.) The event should reflect a realistic course of action the pilot might take to escape from an inadvertent encounter with IFR conditions. POI's should approve methods appropriate to the aircraft, equipment, and facilities available. When the pilot is authorized to operate an appropriately equipped aircraft and the check is conducted at a location where an ILS is operational, an ILS approach should be demonstrated. POI's may also approve a letdown on partial panel when this would be an appropriate course of action.
- 5 See volume 5, paragraph 155 A.
- 6 Helicopters not having standby instrumentation.
- 7 See volume 5, paragraph 155 B. Any two nonprecision approaches authorized by the OpSpecs may be accomplished at the discretion of the inspector or check airman conducting the check.
- 8 See volume 5, paragraph 157.
- 9 SIC's need not be evaluated in circling approaches when the operators procedures restrict SIC's from conducting this event in revenue service.

competency check, or a Part 135 instrument-proficiency check, as applicable.

B. The certification flight test for a flight engineer certificate or class rating simultaneously satisfies the Part 121 proficiency check requirement.

**545. CONDUCT OF PROFICIENCY AND COMPETENCY CHECKS.** Specific direction and guidance for the conduct of certification flight tests is in volume 5, chapters 1, 2, and 3. The same standards and direction and guidance are applicable to both inspectors and check airmen when conducting proficiency checks, VFR competency checks, and IFR competency checks. POI's must evaluate the operator's check airman program to ensure that check airmen are applying the same standards and are adhering to the direction and guidance for proficiency and competency checks that is applicable to certification flight checks.

A. *Waiving of Events.* Inspectors and check airmen may waive those events indicated by an asterisk in figures 3.2.7.1. through 3.2.7.4. This provision applies to all checks conducted under Part 121 and those Part 135 checks which do not involve certification. The waiver provisions of Part 61, Appendix A apply only to airmen employed by Part 121 operators (see FAR 61.157(c)).

(1) The use of waiver authority is not automatic. Check airmen are cautioned to exercise judgment in the use of this authority. When an applicant demonstrates a high level of performance, check airmen should make liberal use of the waiver authority. When an applicant's performance only approaches the minimum acceptable standards, however, none of the events of the flight test should be waived.

(2) Inspectors and check airmen are cautioned that some waiver provisions apply to portions of an event rather than to a whole event (for example, the stall series). Other events have specific conditions which must be fully

is required but cannot be accomplished due to traffic or other reasons, it may be waived. Circling approaches, however, may not be waived for two successive checks. POI's shall ensure that these same provisions are observed for Part 135 operators under the Administrator's authority to determine the content of Part 135 checks.

B. *Training to Proficiency.* When a check airman determines that an event is unsatisfactory, the check airman may conduct training and repeat the testing of that event. This provision has been made in the interest of fairness and to avoid undue hardship and expense for airmen and operators. Training may not be conducted, however, without recording the failure of these events. The quality control of a training program is accomplished, among other means, by identifying those events on checks which crewmembers fail. POI's shall ensure the following guidance is supplied to operators and check airmen concerning the practice of training to proficiency:

(1) Training and checking cannot be conducted simultaneously. When training is required, the check must be temporarily suspended, training conducted, and then the check resumed.

(2) When training to proficiency is required, the check airman must record the events which were initially failed and in which training was given.

(3) When training to proficiency is conducted and the check is subsequently completed within the original session, the overall grade for the check may be recorded as satisfactory. When the training required to reach proficiency cannot be completed in the original checking session, the check must be recorded as unsatisfactory and the crewmember entered into requalification training.

(4) When training to proficiency is required and it is practical to do so, the remaining events of the flight test phase should be completed before training in the failed

**NOTE:** If for mechanical or other reasons the check cannot be completed after the failure of an event and before training and retesting can be accomplished, the check is considered terminated; however, the crewmember may not serve in revenue operations until the check is successfully completed.

**547. USE OF FLIGHT TRAINING DEVICES AND SIMULATORS FOR PROFICIENCY AND COMPETENCY CHECKS.** The guidance of this paragraph applies to the use of flight training devices and simulators in conducting either Part 121 proficiency checks or Part 135 competency and instrument-proficiency checks. The level of flight training device or flight simulator that can be used for any particular flight test event in these checks depends on the crewmember's duty position and on the category of training. The maneuvers and procedures tables along with the introductory information in paragraphs 499 through 511 of this chapter specify the minimum level of flight training device or simulator that can be used for a particular training event. This minimum level is also the level that can be used to test the event during a proficiency or competency check. Before beginning a proficiency or competency check, inspectors and check airmen must determine which flight test events can be conducted in the flight training device or simulator to be used.

**549. THE "OPERATING EXPERIENCE" (OE) QUALIFICATION MODULE.** PIC's and SIC's in Part 121 operations who have been trained under an initial new-hire, initial equipment, transition, or upgrade category of training, must acquire OE. Part 135 specifies that before a pilot may be assigned as a PIC in a commuter passenger-carrying operation, that pilot must acquire OE in each make and basic model of aircraft in which the pilot is to serve as a PIC. The qualification curriculum segment outline that is applicable to these flight crewmember positions must list the appropriate requirements for each

regulations specify that the minimum hours may be reduced to 50% of the total required flight hours by the substitution of 1 takeoff and landing for 1 hour of flight.

*A. Part 121 Minimum OE Flight Hours.*

(1) The minimum OE flight hours for pilots who have been trained under an initial new-hire or an initial equipment curriculum or a PIC transition curriculum which includes training in a flight simulator under FAR 121.409, are as follows:

- Group I reciprocating - 15 hours
- Group I turbopropeller - 20 hours
- Group II turbojet - 25 hours

(2) FAR 121.434(c)(3)(ii) specifies the minimum flight hours for pilots who have been trained under a transition curriculum which does not include an approved course of training in a flight simulator, are as follows:

- Group I reciprocating - 10 hours
- Group I turbopropeller - 12 hours
- Group II turbojet - 15 hours

(3) Although Part 121 requires OE for pilots who have been trained under an upgrade curriculum, the minimum flight hours are not specified. The following minimum flight hours are recommended, however, for an SIC upgrading to PIC, and for a FE upgrading to SIC, regardless of whether or not the upgrade curriculum includes training in a flight simulator:

- Group I reciprocating -  
SIC to PIC - 8 hours

(4) In accordance with FAR 121.434(d), the minimum OE flight hours for FE's who have been trained under an initial new-hire, initial equipment, or transition curriculum are as follows:

- Group I reciprocating - 8 hours
- Group I turbopropeller - 10 hours
- Group II turbojet - 12 hours

*B. Part 135 Minimum Flight Hours.*

(1) The Part 135 flight hour requirement applies only to pilots who will be assigned to serve as PIC in a commuter passenger-carrying operation. In addition, the minimum OE must be acquired for each make and basic model of aircraft in which the pilot is to serve as PIC. FAR 135.244 specifies that the type of engine powering the aircraft determines the minimum flight hours for commuter PIC's, which are as follows:

- Single-engine airplanes and helicopters - 10 hours
- Multiengine, reciprocating-powered, airplanes and helicopters - 15 hours
- Multiengine, turbine-powered airplanes and helicopters - 20 hours
- Turbojet-powered airplanes - 25 hours

(2) Part 135 does not require that SIC's who are to serve in commuter operations acquire OE. POI's should, however, encourage Part 135 commuter operators to include an OE module in their qualification curriculum segments for SIC's. For example, the SIC qualification module could require the pairing of a newly trained SIC

the aircraft has not been previously used by the operator. In this case, the flight hours acquired while conducting proving flights, ferry flights, or training flights may be credited towards the OE requirement.

(1) A pilot in the process of acquiring OE as a PIC under the provisions of Parts 121 and 135 must occupy the appropriate pilot position and perform PIC duties under the supervision of a check airman. The check airman must also occupy a pilot position. In the case of a PIC trained under a transition curriculum, however, the check airman may occupy a jumpseat after the qualifying PIC has made at least two takeoffs and landings and the check airman is satisfied that the pilot candidate is competent to perform the duties of PIC. During the time that a qualifying PIC is acquiring OE, the supervising check airman should give instruction as needed and help to refine the pilot's proficiency as a PIC. The check airman must determine when the PIC is fully proficient and ready to be administered an initial line check. If the qualifying PIC is not ready for an initial line check after the minimum flight hours have been completed, the supervision must be continued until the PIC is proficient. The check airman should not recommend an initial line check until the check airman is satisfied that the qualifying PIC is proficient. If the check airman recommends the PIC for an initial line check before the minimum flight hours are acquired, the time spent conducting the line check may be credited toward the required flight hours. In all cases, however, the qualifying PIC must acquire the minimum flight hours under the supervision of a check airman before the PIC can be released to operate unsupervised in revenue flights.

(2) A pilot in the process of acquiring OE as an SIC under the provisions of Part 121 must perform the duties of an SIC in a pilot seat under the supervision of a check airman, or must observe the performance of those duties from the jumpseat. The preferred method is for the qualifying SIC to occupy the appropriate pilot position and perform the duties of an SIC. It is important that operators

special en route surveillance of that SIC after the SIC is assigned as the required SIC in revenue operations. The purpose of this special surveillance is to determine whether the operator's training and flight testing program sufficiently prepares SIC's for line operations.

(3) A flight engineer in the process of acquiring OE must perform the duties of a flight engineer at the flight engineer station under the supervision of a flight engineer check airman or a qualified flight engineer. In either case, the qualifying flight engineer must acquire the minimum flight hours before being assigned as the required flight engineer in revenue operations. When an operator schedules FE's to acquire OE under the supervision of a qualified flight engineer who has not been trained as a check airman, the POI should consider special en route surveillance of those FE's after they are assigned as required FE's in revenue operations. The purpose of this special surveillance is to determine whether the operator's training, flight testing, and OE programs sufficiently prepare the FE's for line operations.

D. *OE Qualification Guides.* POI's should encourage operators to develop an OE qualification guide to be used by supervisors and check airman. The purpose of the qualification guide is to ensure that a crewmember systematically gains experience in all required duties the crewmember will later be required to perform without supervision. Some of the typical experience events that might be incorporated in a qualification guide are as follows:

- Terminal security procedures
- Aircraft security and anti-hijacking procedures
- Weather forecasts and information sources
- Flight planning

- Air traffic control (ATC) flow control procedures
- MEL and CDL procedures
- Pushback and powerback procedures and limitations
- Procedures for fueling and confirming fuel loads
- Familiarity with major terminal areas
- Terminal and en route communications
- Flight progress and fuel monitoring procedures
- In-flight weather watch
- Diversion procedures

#### **551. THE LINE CHECK QUALIFICATION MODULE.**

Both Parts 121 and 135 specify that before a pilot can serve as an unsupervised PIC in revenue operations, that pilot must have satisfactorily completed a line check. Except for requalification training, the qualification curriculum segment for PIC's should include a line check module as a requirement for all other categories of training. Requalification training curriculums that are used to requalify PIC's who have been unqualified for 12 months or more should include a required PIC line check module. Both Parts 121 and 135 specify that all PIC's must satisfactorily complete a line check once every 12 calendar months in at least one of the aircraft types in which the PIC is to serve. Therefore, the qualification curriculum segment for recurrent training should include a line check module for the PIC.

A. *General Direction and Guidance.* Part 121 specifies that the line check is to be given by a check airman who is properly qualified in the particular airplane being used. In

check, however, should not be conducted until the OE flight hour requirement has been substantially completed. When a PIC serves in both Part 121 and Part 135 operations, a line check conducted in a Part 121 aircraft satisfies the Part 135 line check requirement. POI's should encourage operators to place emphasis on their line check programs. A well run line check program can provide detection of deficiencies and adverse trends and establish the need for a revision of old procedures or an initiation of new procedures. POI's should encourage operators to design and use line check forms to facilitate the collection of such information.

*B. Part 121 Line Checks.* For Part 121 operations, the line check must be conducted over at least one typical route in which the PIC may be assigned. If the typical route the PIC will be flying includes Class II navigation, the line check must be conducted on a route where Class II navigation is used. The line check may be conducted during either revenue or nonrevenue operations.

*C. Part 135 Line Checks.* For Part 135 operations, the line check must consist of at least one route segment over a civil airway, an approved off-airway route, or a portion of either, including takeoffs and landings at one or more airports that are representative of the operator's type of operation. In certain Part 135 operations, it may not be practical to conduct a line check during revenue operations. In these cases the POI may authorize that the line check be conducted during the same flight period that the competency check is conducted. If the line check is conducted in this manner, the line check portion of this flight period must include the requirements previously discussed in this paragraph.

**553. ADDITIONAL CHECKING MODULES.** Additional checking modules include flight test events that must be conducted to qualify flight crewmembers for special operations, such as CAT II or CAT III instrument approach procedures. Another example of an additional

(1) The regulations and advisory circulars (ACs) require additional checks, but usually do not specify the content of these checks. Since there are often several acceptable means of conducting these checks, the additional checking module outline must specify the content of these checks (see examples in paragraph 525).

(2) When a Part 121 or 135 operator chooses to conduct an additional checking module in conjunction with a basic checking module, the requirements of both modules must be accomplished. A single event may, however, be credited for both modules simultaneously. For example, an operator who conducts basic checking modules and CAT II additional checking modules at the same time, may combine the ILS approach requirements. The basic checking module requires a normal ILS; a manually flown, engine-out ILS; a coupled ILS; a landing from an ILS; and a missed approach from an ILS. The normal ILS and the coupled ILS may be combined in the basic checking module for a minimum of two ILS approaches. In this case, one approach must terminate in a landing and one in a missed approach. For an operator who conducts only coupled CAT II approaches, the CAT II additional checking module requires a minimum of two approaches to CAT II minimums; one approach must be to a landing and one to a missed approach. A POI may approve combining the compatible events of these two modules. In this case, the combined requirement is one engine-out, manually flown ILS to CAT I minimums; one coupled, CAT II ILS to a landing, and one coupled, CAT II ILS approach to a missed approach. POI's who have concerns over what combinations are permissible should consult the regional flight standards division (RFSD). The RFSD should coordinate with AFS-210 when necessary.

B. Operators may choose to conduct additional checking modules separately from a proficiency check, a competency check, or a line check. It may be more practical to accomplish an additional flight test separately because of high-minimum PIC requirements or because of pilot bidding practices for international routes. When an operator





DC-10	380	Three Type A exit pairs, and one improved Type I exit pair with a 36 inch passageway leading to exits, double-lane slides, and two flight attendant assist spaces each at doors 1L and 1R	Demo	Dual aisle interior configuration, an improved Type I exit is known as a Type "B," contact LAACO for additional details concerning this configuration; reference Exemption 1573
-------	-----	---	------	---

---

NIPPON

YS-11	59	Data to be added at next revision	Add 5 if two inflatable slides are installed
-------	----	-----------------------------------	--

---

VICKERS

VC 745 D	51	Other data not appropriate due to age of airplane
VC 800	72	Other data not appropriate due to age of airplane

---

<sup>1</sup> <sup>2</sup> <sup>3</sup> Refer to footnotes at end of table

<sup>1</sup>An asterisk beside a passenger capacity value indicates that the capacity is restricted by the exit rating limit and no increase is allowed without a change to the number and/or type of exits used.

<sup>2</sup>The method of compliance indicates whether the capacity was approved based on the conduct of a full-scale evacuation demonstration (demo) or an analysis. An analysis is based on a previous full-scale demo and/or other tests that validate the analysis. In the case of airplanes with a certification basis of Civil Air Regulations (CAR) 4b, such as the Boeing 727, neither demonstration nor analysis was required. In these cases, certain criteria of FAR 25.2 may be applicable for increases in passenger capacities; either the Seattle or Los Angeles Aircraft Certification Office should be contacted for details.

<sup>3</sup>This table and these notes describe special features pertinent to the listed passenger capacities. They may not represent all of the unique factors affecting the passenger capacities and interior configurations of the listed airplane models. For this reason, aircraft certification engineering personnel should be consulted, through either the Seattle Aircraft Evaluation Group, ANM-270S (FTS: 446-1551, COM: 206-431-1551), or the Long Beach Aircraft Evaluation Group, ANM-270L (FTS: 795-2871, COM: 213-548-2871), prior to approving a change to either the passenger capacity or interior configuration.

---

[PAGES 3-915 THROUGH 3-950 RESERVED]

operator recordkeeping system (see volume 3, chapter 1, section 1, paragraph 2079 for definitions of accepted and approved material). This section contains a general overview of proprietary information, the regulatory requirements for recordkeeping under Parts 121 and 135, and definitions of terms as they relate to operator recordkeeping. Section two contains information and guidance about the acceptance or approval of an operator's recordkeeping system. Section three contains information and guidance about currency periods for records. Section 4 contains information about computer-based recordkeeping.

### **1773. CHARACTERISTICS OF INFORMATION AND RECORDS.** Operators collect and use both information and records in the conduct of operations.

A. *Information Versus Record.* Inspectors should be aware of the difference between a recordkeeping system and a management information system. A record is defined as an account which preserves evidence of the occurrence of an event. In general, a record must show what event occurred, to whom, by whom, when, and proof of the event's occurrence, such as a certification by signature or by electronic means. A system that collects related information for making operational decisions but does not preserve evidence of the event's occurrence is not a recordkeeping system.

B. *Proprietary Information.* Proprietary information is that information which is the sole property of the operator. Inspectors do not have a right to compel an operator to divulge proprietary information. Questions about what information the operator must provide and what information the operator may withhold should be referred to Regional Counsel. Inspectors frequently acquire proprietary information in the process of conducting inspections and investigations. Inspectors may use such information for official purposes but may not divulge such information to third parties. For example, if an operator chooses to maintain flight and rest records on a payroll form, the

**1775. REGULATORY REQUIREMENTS.** Parts 121 and 135 require that operators maintain certain records on crewmembers and dispatchers participating in flight operations. Parts 121 and 135 specify certain regulatory requirements for recordkeeping.

A. *Part 121.* FAR 121.683 requires that operators maintain current records to show that each crewmember and dispatcher, as applicable, complies with proficiency and qualification as stated in this chapter. FAR 121.683 also requires that operators record each action taken concerning the release from employment or physical or professional disqualification of any flight crewmember or dispatcher and retain that record for six months. FAR 121.683 does not specify time periods that qualification records must be kept other than those in FAR 121.683(a)(2). This FAR also provides for approval by the Administrator of computer record systems to comply with the recordkeeping requirements of that section. FAR's 121.695 and 121.697 specify retention periods for load manifests, flight or dispatch releases, and flight plans. FAR 121.711 specifies the retention period of en route radio contact between the operator and the operator's pilots.

B. *Part 135.* FAR 135.63 requires that operators keep certain records at either the principal business office or another place approved by the Administrator, and establish retention periods for certain required records.

C. *Other.* In order for an operator to show regulatory compliance and to allow the FAA to conduct surveillance to determine this compliance, the operator may elect to maintain other types of records, such as ETOPS and LORAN navigation records, even though they are not specifically mentioned in Parts 121 and 135. Other examples are company flight instructor/check airman training records, school designated examiners (SDE's), and aircrew program designees (APD's).

retrieved electronically by a computer system rather than in traditional hard-copy form.

C. *Computer Hardware*. A computer and the associated physical equipment directly involved in the performance of communications or data-processing functions.

D. *Computer Software*. Written or printed data, such as programs, routines, and symbolic languages, essential to the operation of computers.

E. *Data Backup*. Use of one of several recognized methods of providing a secondary means for storing records. This backup can be used to reconstruct the format and content of electronically stored records in case of loss of, failure of, or damage to the primary record-keeping system.

F. *Data Base Management System (DBMS)*. A computer software program capable of maintaining stored information in an ordered format, manipulating that data by mathematical methods, and data processing functions such as retrieval of data.

G. *Data Entry*. The process by which data or information is entered into a computer memory or storage medium. Sources include manually written records, real-time information, and computer-generated data.

H. *Data Verification*. A process of assuring accuracy of data records by systematically or randomly comparing electronic records with manual data entry documents.

I. *Electronic Mail*. The transmittal of messages, documents, or other communications between computer systems or other telecommunication channels.

J. *Electronic Signature*. Any of several generally recognized techniques for electronically identifying individuals entering, verifying, or auditing computer-based records, and checking for authenticity.

K. *Grace Period*. For example, if a crewmember or aircraft dispatcher whose training/checking month is August receives the required recurrent training in September, August remains as the training/checking month. Also, if a crewmember or aircraft dispatcher fails to complete the required training during the grace period and acquires flight time or functions as a dispatcher during the month following the training/checking month, the crewmember or aircraft dispatcher is not in violation of the FAR's since the month following the training/checking month is still considered part of the grace period.

L. *Modem*. A device that can use existing telephone transmission circuits to transfer information between either two or more computer systems, or computers and remote terminals.

M. *Password*. An identification code required to access stored material. A device intended to prevent information from being viewed, edited, or printed by unauthorized persons.

N. *Proprietary Information*. Information which is the private property of the operator.

O. *Real-Time Record*. Information that is entered into a computer-based recordkeeping system immediately following the completion of an event or fulfillment of a condition, without first relying on the manual recording of the information on a data entry form.

P. *Records*. Information in a pre-determined format that shows that the operator or its personnel have accomplished a particular event, have met certain criteria, or have fulfilled specific conditions required by the FAR's.

Q. *System Security*. Policies, procedures, and system structures designed to prevent users from gaining access to sections of a data base to which they are not authorized access.

T. *User Identification.* A series of alphabetic and/or numeric characters assigned to one or more individuals or organizations for the purpose of gaining access to a computer system and accounting for time usage.

**1779. MERGERS AND ACQUISITIONS.** When two or more computer-based recordkeeping systems are being consolidated because of a merger or acquisition, the consolidation of the training programs and the recordkeeping systems which correlate to those programs is of particular importance. Accurate consolidation of those systems must be given priority by the POI. Training records of the acquired company's flight operations personnel must comply with the basic FAR requirements before being accepted. Once the surviving system has been approved, the operator should transfer data from the existing system into the surviving system.

A. *Unavailable Records.* Due to variances in recordkeeping methods of individual operators, some records may not be available or useable for inclusion in the surviving computer-based recordkeeping system. In this case, the operator must reconstruct records from available resources. If there are no resources from which to reconstruct records, assumptions that experienced

operator's existing recordkeeping system. Minor changes such as modifications to display formats may not require a formal evaluation and approval; major changes affecting system operation or capability may require an indepth evaluation and approval process.

C. *Transition from Existing System to Surviving System.* The transition procedures from the operator's existing system to the surviving system must be approved by the POI. During this transition, the POI shall determine the time period required for maintaining the two systems in parallel operation. The surviving system should have at least the same backup capability as the existing system. The integration of the existing and surviving systems may be accomplished by electronically combining the data bases of the two systems or by other methods, as long as the accuracy of the data is maintained.

**NOTE: A change in computer hardware which does not affect functions or capabilities of the system does not constitute a system transition and does not require approval.**

**1780. - 1790. RESERVED.**

**[PAGES 3-954 THROUGH 3-956 RESERVED]**



approval process described in Volume 1, chapter 1, section 6 of this handbook (see job aids in figures 3.11.1. and 3.11.2. for assistance during this process (TBD)).

**1793. REGULATORY REQUIREMENTS.** FAR 121.68 requires that the FAA approve a Part 121 operator's computer-based recordkeeping system. All other recordkeeping systems must be acceptable to the administrator. POI's shall determine that an operator's recordkeeping system is in compliance with applicable FAR's.

POI's shall conduct surveillance of an operator's records on a routine basis to ensure that the records are being maintained. POI's shall also ensure that the records continue to contain the required information to show compliance with the FAR's. The operator shall develop a section in its general operations manual (GOM) that provides detailed instruction on the use of the recordkeeping system and as part of the GOM, must be provided to the POI.

**1796. - 1806. RESERVED.**

**[PAGES 3-958 THROUGH 3-960 RESERVED]**





POI's when determining the necessary currency periods for records.

**1809. CATEGORIES OF RECORDS.** In order to demonstrate regulatory compliance, training and qualification records must be retained to document currency and prerequisite qualification.

A. *Permanent Records.* Permanent records are the documentation of the successful completion of training or qualification events which are prerequisites for subsequent assignments. These records must be retained for the duration of the individual's employment with that operator to substantiate the individual's qualifications. Examples of permanent records include the following:

- Basic indoctrination records
- Initial qualification records
- Transition and upgrade aircraft training records
- Required operating experience (OE) observation of by FAA inspector records

B. *Currency Records.* Currency records are the documentation of training or qualification events which qualify individuals for their present assignments and are required to be reaccomplished at scheduled intervals. In order to show continuity of qualification, this type of record must be retained until superseded by a record of similar training or qualification.

**NOTE:** Many operators revise FAR 121.409 LOFT scenarios annually in order to preclude any crewmember from receiving the same scenario more than once. An operator that revises LOFT scenarios less frequently should be required to maintain additional records to ensure that the crewmember does

record for at least 6 calendar months.

**NOTE:** For Part 121 operators, permanent records, including records of action, may be discarded 6 months after release, termination, or disqualification from employment. For Part 135 operators, these records may be discarded after 12 months.

D. *Additional Records.* The operator may need to keep additional records as a condition of special operational authorizations. For example, a record of successful operation is required before the FAA can grant approval to increase the extended range operations with two engine airplanes (ETOPS) en route alternate time requirements from 90 to 120 minutes. Operators may be required to keep additional training and qualification data in order to justify changes in the authorization of such areas as ETOPS, training hour reductions and OpSpecs. POI's should encourage operators to establish additional recordkeeping for analysis purposes. Operators may depersonalize those records not required by the FAR's.

**NOTE:** Operators that have been granted exemption to the FAR's may be required by the terms of those exemptions to retain additional records for a specified period.

**1811. CURRENCY PERIODS FOR RECORDKEEPING SYSTEMS.** When evaluating any recordkeeping system, POI's shall ensure that the system has the capability for entry, storage, retrieval, and archiving of all required records in the categories of records for which the operator is seeking acceptance or approval (see job aids 3.11.3.1. and 3.11.3.2. for currency periods and regulatory references).

**1813. RECOMMENDED ADVANCED QUALIFICATION PROGRAM (AQP) URGENCY PERIODS. (TBD)**

**1815. (TBD)**

**1816. - 1826. RESERVED.**

Proficiency Check	Pilot-In-Command (PIC)	121.441 and 135.63	8 months; 14 months if qualified in two aircraft; 20 months if alternating recurrent LOFT with proficiency checks and recurrent training
	Second-In-Command (SIC)		14 months
	Flight Engineer (FE)		14 months
Recurrent Flight Training	PIC	121.427 and 135.63	8 months; 14 months if qualified in two aircraft; 20 months if alternating recurrent LOFT with proficiency checks and recurrent training
	Second-In-Command (SIC)		14 months
	FE		14 months
Flight Attendant Competency Check/Test	Flight Attendant	121.421 (initial)	permanent
		121.427	14 months
		135.351 (recurrent quiz/review)	14 months

Dispatcher Competency Check/Test	Dispatcher Competency Check/Test	121.422 (initial)	permanent
		121.427	14 months
		135.351 (recurrent quiz/review)	14 months
Recurrent Ground Training	Pilot, FE, Flight Attendant, Aircraft Dispatcher, and Navigator	121.427, 135.63, and 135.351	14 months
Recurrent Ground Training (Emergency Training ("Hands-on") and alternate drills)	Pilot, FE, Flight Attendant, Aircraft Dispatcher, and Navigator	121.417	50 months (exception: evacuation slide - permanent)
		135.351	14 months
Line Check	Pilots	121.440 and 135.63	14 months
* Special Airports, Route, and Area Qualifications (such as NOPAC, CEPAC, and MNPS)	Pilots	121.445	12 months
		135.63	12 months

\* This record must reflect either current training or airport qualification for the airman's current duty assignments in accordance with any authorization, exemption, and additional limitation.

Recency of Experience	Pilots	121.439 and 135.63	90 days
	FE	121.453	6 months
Aircraft Dispatcher Initial Operating Familiarization	Aircraft Dispatcher	121.463	14 months
Aircraft Dispatcher Recurrent Operating Familiarization	Aircraft Dispatcher	121.463	14 months
Operating Experience (OE)	Pilot and FE	121.434 and 135.244	retain for current and previous aircraft
FAA Observation of OE	PIC	121	permanent
Flight Attendant Supervisor Designation	Flight Attendant Supervisor	121.434	permanent
Aircraft Dispatcher Supervisor or Designated Ground Instructor	Aircraft Dispatcher Supervisor or Designated Ground Instructor	121.422	permanent
APD/SDE Designations	Pilot and FE	183	retain for current aircraft
Check Pilot Authorizations		135.63	retain for current aircraft
Check Airman Initial Ground Training		121.413 and 135.63	retain for current aircraft

Check Airman Initial Flight Training		121.413 and 135.63	retain for current aircraft
* Flight Instructor Initial Ground Training		121.413 and 135.63	retain for current aircraft
Advanced Simulation Instructor/ Check Airman (Part 121)			initial Appendix H training - retain for current aircraft
			recurrent Appendix H training - 14 months
Flight Time Limitations and Required Rest Record		121.683 and 135.63	current and previous calendar year
Hazardous Materials Training		121.433a and 135.63	14 months
Airman Certificate Information		121.683 and 135.63	required by duty position
Airman Medical Certificate Information		121.683 and 135.63	maintain current information
Aeronautical Experience		135.63	permanent
Physical or Professional Disqualification		121.683	6 months
		135.63	12 months

\* If the instructor does not hold a flight instructor's certificate, additional training is required.

Initial Ground Training	Pilot	121.419 and 135.345	retain for current aircraft
	FE	121.419	
	Flight Attendant	121.421 and 135.349	
	Aircraft Dispatcher	121.422	retain for current aircraft
	Navigator	121.420	
Initial Flight Training	Pilot, FE, Flight Attendant, Aircraft Dispatcher, Navigator	121.424 and 135.347	retain for current aircraft
Transition Ground Training	Pilot	121.419 and 135.345	retain for current aircraft
	FE	124.419	
	Flight Attendant	121.421 and 135.349	
	Aircraft Dispatcher	121.422	
	Navigator	121.420	
Transition Flight Training	Pilot	121.424 and 135.347	retain for current aircraft
	FE	121.425	
	Navigator	121.426	

Upgrade Ground Training	Pilot	121.419 and 135.345	retain for current aircraft
Upgrade Flight Training	Pilot	121.424 and 135.347	retain for current aircraft
Differences Ground and Flight Training	Pilot	121.418 and 135.341 - (ground)  135.347 - (flight)	retain for current aircraft
	FE	121.418	
	Flight Attendant	121.418 and 135.341	
	Aircraft Dispatcher	121.418	
	Navigator	121.418	
One Time Training Requirements - Basic Indoctrination		121.415 and 135.63	permanent
One Time Training Requirements	Flight Attendant OE	121.434	permanent

Training	135.349	
Initial Equipment Training	121.683, 135.63, and 135.345	permanent
Transition Training	121.683, 135.63, and 135.349	permanent
Upgrade Training	121.683(a) and 135.63	permanent
Recurrent Training	121.427 and 135.351	permanent
Emergency Training "Hands-On"	121.417	26 months
Alternate Drills "Hands-On"	121.417	50 months
Emergency Training and Alternate Drills "Hands-On"	135.331	permanent
Requalification Training		retain for current aircraft
Check Airman/ Instructor Training	121.413 and 135.339	retain for current and previous aircraft

---

[PAGES 3-969 THROUGH 3-972 RESERVED]



by principal operations inspectors (POI's) when evaluating and approving an operator's computer-based recordkeeping system.

**1829. REGULATORY REQUIREMENTS.** Parts 121 and 135 require that operators maintain certain records on crewmembers and aircraft dispatchers. FAR 121.683(c) requires that computer-based recordkeeping systems be approved by the FAA. FAR 135.63 neither specifies the method by which Part 135 operator records are kept nor requires approval of computer-based record systems for Part 135 operators.

**1831. GUIDELINES FOR SYSTEM APPROVAL.** POI's shall ensure that operators follow certain guidelines and submit certain information when applying for approval of a computer-based recordkeeping system.

*A. Approval and Evaluation Process.* A Part 121 operator may apply for approval of a computer-based recordkeeping system that is designed to satisfy either all regulatory requirements or specific regulatory requirements, such as training records. When evaluating a computer-based recordkeeping system, POI's shall ensure that the proposed system provides a means of maintaining accurate, timely, and reliable records required by the FAR's. When approving the system, POI's shall follow the general 5-step approval process described in volume 1, chapter 4, section 6 of this handbook.

(1) *Application by Letter.* Part 121 operators must apply for approval of computer-based recordkeeping systems by letter.

(a) *Content of Letter.* The letter of application must contain the following information:

- A general description of the proposed computer-based recordkeeping system

- Access and security procedures for both the operator and FAA personnel

- Basic procedures for data-entry personnel
- A general description of any special procedures and capabilities

(b) *Categories of Records.* The letter of application must include one or more of the following categories of records which will be maintained by the computer-based recordkeeping system:

- Airman training records (including pilot, flight engineer, flight navigator, flight attendant, flight instructor, check airman, and aircraft dispatcher training records)
- Aircraft qualification records (including aircraft type ratings, proficiency checks, competency checks, and line checks)
- Flight time limitation and rest requirement records
- Medical qualification records (when applicable)
- Route, "special airport," and area qualification records
- Operating experience (OE) and/or operating familiarization records
- Pilot recency of experience records

- Load manifests, dispatch/flight releases
- Communication records

(2) *Parallel Recordkeeping System.* The POI shall ensure that any operator that requests approval of a computer-based recordkeeping system retains data-entry forms or other pertinent non-electronic records in a parallel record system. The POI shall ensure that all required records continue to be maintained while the computer-based recordkeeping system is being installed, tested, and evaluated, and data-entry personnel are being trained to recognize regulatory terminology and requirements.

B. *System Evaluation.* POI's shall evaluate the computer-based recordkeeping system capabilities and level of security.

(1) *System Capabilities.* Prior to approval, the POI should carefully evaluate the proposed computer-based recordkeeping system to ensure that the system is capable of providing accurate, timely, and reliable records, as required by the FAR's. The POI shall review the operator's proposed transition plan and user manual, and observe operation of the operator's existing recordkeeping system in parallel operation with the proposed computer-based system. The extent of this evaluation depends on the complexity of the proposed system and its intended use. The evaluation of a system designed to comply with all regulatory requirements will be much more complex than that of a system designed to maintain records in one specific category. The POI shall ensure that system security, record retention periods, and data backups are adequate. Potential problem areas should be identified and corrected prior to approval.

(2) *Level of Security.* POI's shall evaluate the proposed system's level of security to ensure that the data base is adequately protected.

designated by the operator should actively monitor user access and periodically review access control requirements. This representative shall be specifically identified and authorized in the operator's proposal and user manual.

(c) *Electronic Signature.* The operator should establish a procedure for allowing designated personnel such as flight instructors/check airmen, aircraft dispatcher supervisors, and flight attendant supervisors to electronically certify all record entries for which they are responsible. This certification may take one of many forms such as full name, initials, or unique identification number. Each designated person with authorization to make such entries shall be issued a unique individual access code and password in order to validate the entry. The operator may devise a system that requires the validating official to either enter a real-time record into the system or complete a written transmittal document to be given to data-entry personnel. If a written transmittal document is used, the identification of the validating official must become part of the record.

(d) *Unrestricted Data Retrieval.* Appropriate FAA personnel assigned to the operator should be provided with an access level which allows unrestricted data retrieval of all records required by the FAR's. If the operator elects to use the computer recordkeeping system's capability for electronic designation of APD's and check airmen, an appropriate level of access should be provided to the POI or a designated representative to allow necessary data entries.

(3) *Data Backup Capability and Storage.* The POI shall verify that the operator has established a backup capability to generate a complete set of duplicate records, either electronic or non-electronic. These records should be stored in a location separate from the main information storage facility. These records may be stored in any form acceptable to the POI, including magnetic tape, magnetic or optical disk, microfiche, or printed records. The operator shall backup data as frequently as appropriate to the operator's level of operations and system complexity. For

include guidance in the automated recordkeeping system structure and instructions for using computer commands for such operations as data entry, data processing, data retrieval, and report generation. This manual should address system security procedures and responsibilities, including identification of personnel charged with various levels of data entry, data verification and correction, data audits, and quality control. It should also identify individuals with the authority to issue user-access codes and passwords.

(5) *Audit Procedures.* The POI shall ensure that operators' programs contain audit procedures that are adequate to assure the accuracy of the data base. The frequency and scope of these procedures should reflect the complexity of the computer-based recordkeeping system and the size of the data base.

**1833. GRANTING APPROVAL.** When all requirements of paragraphs 1831.B.(1) through 1831.B.(5) have been met, the POI may either grant approval for the entire computer-based recordkeeping system or any part of the system. This approval shall be a nonstandard paragraph in the operations specifications (OpSpecs) and shall directly reference the manual where the information in the recordkeeping system is maintained.

**1835. SYSTEM SURVEILLANCE.** POI's are responsible for conducting system surveillance which includes periodic inspections and audits, inspection intervals, and data-entry accuracy.

A. *Inspections and Audits.* After the computer-based recordkeeping system is approved and fully operational, the POI shall ensure compliance through periodic inspections and audits. These inspections and audits shall be conducted using the same criteria as those used during the initial approval process. The POI should plan inspection intervals at least once every 12 months. The annual inspection should normally be conducted in conjunction

- The extent of the system's security measures
- The capability and frequency of the system's self-audit function

C. *Scope of the Inspection.* The POI shall determine the scope of the inspection. It may be appropriate to sample a small number of records in each category that the system is approved to maintain, or to conduct an indepth inspection of a specific category of records, such as aircraft dispatcher training.

D. *Data-Entry Accuracy.* The POI shall ensure data-entry accuracy during all inspections and audits. A useful evaluation tool might be to compare the operator's required records with FAA surveillance, inspection, and certification records.

**1837. ADDITIONAL SYSTEM CAPABILITIES.** In addition to record retention and retrieval, the operator may request approval of a system with additional capabilities such as electronic communications and surveillance.

A. *Electronic Communications.* The operator may provide the POI with electronic mail capability which would allow the operator to request designation of certain airmen, such as check airmen, APD's, and SDE's. This capability would also allow the POI to respond electronically to these requests, thereby increasing both operator and FAA efficiency and convenience. To implement this electronic mail capability, the operator should provide the POI with system access from the POI's facility by providing necessary hardware to be installed at the POI's facility.

B. *Electronic Surveillance.* The operator may also provide direct access to the operator's computer-based recordkeeping system to allow the POI to carry out required surveillance activities such as random record retrieval for spot inspections, data audits, selective data retrievals, and reports or summaries. The operator should limit system



1. General .....	4-1
3. The Objective of Air Navigation .....	4-1
5. General Concepts .....	4-1
7. The Concept of an ATC Clearance .....	4-2
9. Concept of Navigation Performance .....	4-2
11. Concept of the Degree of Accuracy Required for Control of Air Traffic .....	4-5
13. Concept of Operational Service Volume .....	4-5
15. Categories of Navigational Operations .....	4-5
17. US Public Law, International Agreements, and Standards Related to Air Navigation .....	4-9
19. Relationship Between the FAR's, ICAO, SARP's, and National Regulations .....	4-10
21. Relationship of US Operational FAR's to Air Navigation .....	4-11
23. FAR's Specifying Air Navigational Equipment Requirements .....	4-12
25. Protection of Persons and Property .....	4-16
26.-30. Reserved .....	4-16

## Section 2. AIR NAVIGATION APPROVAL PROCESS

31. General .....	4-22
33. Phase One-Subject Familiarization and Requirements Identification .....	4-22
35. Inspector-Subject Familiarization and Approval Requirements .....	4-22
37. Determining the Class of Navigation .....	4-22
39. Special Operations .....	4-23
41. Airworthiness of Navigation Equipment .....	4-24
43. Training Programs and Manuals .....	4-24
45. Minimum Equipment Lists .....	4-24
47. Navigation Practices, Techniques, and Procedures .....	4-24
49. Demonstration Requirements .....	4-24
51. Communication of Requirements to the Operator .....	4-25
53. Completion or Termination of Phase One .....	4-25
55. Phase Two-Request for Approval .....	4-26
57. Phase Three-Evaluation of the Proposal .....	4-26
59. Phase Four-Validation Tests .....	4-26

71. General	4-32
73. VFR Class I Navigation	4-32
75. Types of VFR Class I Navigation	4-32
77. VFR Class I Navigation Approvals	4-33
79. Part 135 Pilotage VFR Class I Navigation Standard Practices (TBD)*	4-33
81. Part 135 Station-Referenced VFR Class I Navigation Standard Practices (TBD)*	4-33
83. Part 121 Station-Referenced VFR Class I Navigation Standard Practices (TBD)*	4-34
85. IFR Class I Navigation	4-34
87. Types of IFR Class I Navigation	4-34
89. IFR Class I Navigation Approvals	4-35
91. Standard ICAO NAVAID IFR Class I Navigation Standard Practices (TBD)*	4-36
93. Area Navigation Systems IFR Class I Navigation Standard Practices (TBD)*	4-36
95. Part 135 Single Pilot IFR Class I Navigation Standard Practices (TBD)*	4-36
97. Part 135 Helicopter IFR Class I Navigation Standard Practices (TBD)*	4-36
98.-110. Reserved	4-36

#### Section 4. CLASS II NAVIGATION

111. General	4-43
113. VFR Class II Navigation	4-43
115. Part 135 Airplane VFR Class II Navigation Standard Practices (TBD)*	4-43
117. Helicopter VFR Class II Navigation Standard Practices (TBD)*	4-43
119. IFR Class II Navigation	4-43
121. Types of IFR Class II Navigation	4-43
123. IFR Class II Navigation Approvals	4-46
125. Class II Navigation Using ICAO Standard NAVAID'S Supplemented by Dead Reckoning Standard Practices (TBD)*	4-47
127. Pilot-Operated Electronic Long-Range Navigation Systems Standard Practices (TBD)*	4-47
129. Flight Navigator Standard Practices (TBD)*	4-47
131. Confirmation of System Accuracy and Reliability (TBD)*	4-47
132.-140. Reserved	4-47

(NAI/MNPS) .....	4-54
147. Canadian Minimum Navigation Performance Specifications Airspace .....	4-57
149. Operations in Airspace Where Composite Separation is Applied by ATC .....	4-57
151. Areas of Magnetic Unreliability .....	4-60
153. Areas With Significant Communications and/or Air Traffic Control Difficulties ...	4-63
155. Evaluation Criteria for Areas with Communications and ATC Difficulties .....	4-63
157. Operations in Sensitive International Areas .....	4-64
159. South Atlantic and Gulf of Mexico Control Areas (Atlantic and Gulf Routes) ....	4-64
161. Special Areas Where Redundant Long-Range Navigation Systems are Usually Not Required .....	4-65
162.-400. Reserved .....	4-66

## CHAPTER 2 ALL-WEATHER TERMINAL AREA OPERATIONS

### Section 1. INTRODUCTION TO AND EVOLUTION OF ALL-WEATHER TERMINAL AREA OPERATIONS

401. General Background .....	4-121
403. Evolution Of AWTA Operations .....	4-121
405. Current Category I (CAT I) Operations .....	4-122
407. Evolution Of Current Category II (CAT II) Operations .....	4-123
409. Evolution Of Current Category III (CAT III) Operations .....	4-124
411. Future Reductions To Landing Minimums .....	4-125
413. Authority And Responsibility For Approval Of AWTA Operations .....	4-125
414.-440. Reserved .....	4-126

### Section 2. GENERAL CONCEPTS FOR ALL-WEATHER TERMINAL AREA APPROACH PROCEDURES

441. General .....	4-134
443. Basic Types Of AWTA Approach And Landing Operations .....	4-134
445. Categories Of Instrument Approach Procedures .....	4-134

457. Other Instrument Approach Procedures (IAP's) . . . . .	4-137
459. Special Approach And Landing Operations . . . . .	4-138
460.-470. Reserved . . . . .	4-139

### Section 3. FACTORS AFFECTING ALL-WEATHER TERMINAL AREA OPERATIONS

471. General Factors Affecting Operating Minimums . . . . .	4-146
473. Precision Of Flightpath Control . . . . .	4-146
475. Obstacle Clearance . . . . .	4-146
477. Function Of External Visual References . . . . .	4-146
479. Maximum Sink Rates . . . . .	4-147
481. Cockpit Design . . . . .	4-147
483. Minimum Instrument Flight Altitudes . . . . .	4-148
485. Minimum Visibility, Runway Visibility Values, And/Or Runway Visual Range . . . .	4-149
487. Safety During Go-Arounds . . . . .	4-149
489. Concept Of Decision Height (DH) . . . . .	4-150
491. Concept Of Minimum Descent Altitude And Missed Approach Point (MDA/MAP) . . . . .	4-151
493. Concept Of Circling Maneuvers . . . . .	4-152
495. Concept Of RVR . . . . .	4-153
499. Weather Conditions/Fog Structure . . . . .	4-154
501. Visual Aids And Runway Environment . . . . .	4-158
503. Effects Of Aircraft/Cockpit Design On Seeing-Conditions . . . . .	4-158
505. Eye Reference Position . . . . .	4-161
507. Threshold Crossing Height (TCH) Concept . . . . .	4-161
509. Visual Illusions . . . . .	4-162
511. Stabilized Approach Concept . . . . .	4-163
513. Air Traffic Control Concepts . . . . .	4-164
515. Airport Facilities And Services . . . . .	4-165
516.-530. Reserved . . . . .	4-167

### Section 4. CATEGORY I OPERATIONS

531. General . . . . .	4-173
------------------------	-------



543.	Standard Air Carrier Operating Minimums . . . . .	4-176
545.	Authorized CAT I Instrument Approach Procedures . . . . .	4-177
547.	Basic IFR and Standard CAT I Operating Practices . . . . .	4-177
549.	The Standard AWTA Operating Procedure . . . . .	4-180
551.	Evaluation and Approval of CAT I Operations . . . . .	4-181
553.	CAT I Airport, Runway, and Ground-Based Equipment Requirements . . . . .	4-183
555.	CAT I Operations Using Basic Air Carrier Operating Minimums . . . . .	4-184
557.	CAT I Operations Using Standard Air Carrier Operating Minimums . . . . .	4-187
559.	Use of Standard Operating Minimums in Turbojet, Turbofan, and Propfan Airplanes . . . . .	4-188
561.	Special CAT I Operations . . . . .	4-190
563.	Approval of CAT I All-Weather Operations . . . . .	4-192
564.-580.	Reserved . . . . .	4-192

## Section 5. CATEGORY II OPERATIONS

581.	General . . . . .	4-211
583.	CAT II Operational Concepts . . . . .	4-212
585.	Standard CAT II Operations . . . . .	4-213
587.	Special CAT II Operations . . . . .	4-215
589.	CAT II Terminal Instrument Approach Procedures (U.S. Airports) . . . . .	4-216
591.	Foreign CAT II Instrument Approach Procedures . . . . .	4-217
593.	Foreign Flag CAT II Operations in the US . . . . .	4-217
595.	CAT II Evaluation and Approval Process . . . . .	4-218
596.-610.	Reserved . . . . .	4-219

## Section 6. CATEGORY III OPERATIONS

611.	General . . . . .	4-241
613.	CAT III Operational Concepts . . . . .	4-242
615.	Establishing CAT III Operating Minimums . . . . .	4-243
617.	Functional Requirements for Visual Reference . . . . .	4-245
619.	Decision Region . . . . .	4-245
621.	Radio Altimeter and Pre-Threshold Terrain . . . . .	4-246

633. Foreign CAT III Instrument Approach Procedures .....	4-252
635. Foreign Flag CAT III Operations in the U.S. ....	4-253
637. CAT III Evaluation and Approval Process .....	4-255
639. Operations Specifications for CAT III Operations .....	4-260
640.-644. Reserved .....	4-260

## Section 7. LOWER-THAN-STANDARD TAKEOFF MINIMUMS

645. General .....	4-281
647. Training .....	4-281
648.-658. Reserved .....	4-281

## Section 8. MLS, GPS, AND LORAN-C SYSTEMS (TBD)\*

659.-670. Reserved .....	4-299
--------------------------	-------

## Section 9. AUTHORIZATION FOR THE USE OF SPECIAL TERMINAL INSTRUMENT PROCEDURES

671. General .....	4-321
673. Background .....	4-321
675. Authority and Responsibility for Special Terminal Instrument Procedures .....	4-321
677. Special Procedures .....	4-322
679. POI Authorization for Operator Use of a Special Terminal Instrument Procedure .....	4-322
681. Practices and Policies for IFR Departure Procedures .....	4-323
683. Flight Procedures Standards Waiver to Special Terminal Instrument Procedures .....	4-323
685. Provisional Authorizations .....	4-323
687. Special IFR Departure Procedures for Departure from Airports Without Instrument Approach Procedures (Part 135 Operators Only) .....	4-324
689. NOTAM's .....	4-324
690.-900. Reserved .....	4-324

903. Overview of Airplane Performance Rules .....	4-331
905. Large Airplane Certification .....	4-333
907. Determining Applicable Operating Rules .....	4-333
909. Small Airplane Certification .....	4-333
911. V Speed Definitions .....	4-335
913. Runway Length .....	4-336
915. Runway Limit Weight-Transport and Commuter Categories .....	4-337
917. Takeoff Conditions .....	4-337
919. Wind Conditions During Takeoffs and Landings .....	4-338
921. Water and Contamination of Runways .....	4-339
923. Tire Speed and Brake Limits .....	4-339
925. Takeoff Climb Limit Weight .....	4-339
927. Takeoff Weights Limited By Obstacles .....	4-339
929. En Route Performance Limits .....	4-340
931. Approach and Landing Climb Limits .....	4-342
933. Landing Distance .....	4-342
934.-946. Reserved .....	4-343

## Section 2. AIRPLANE PERFORMANCE RULES

947. General .....	4-365
949. Large, Reciprocating-Powered, Transport Category Airplane Performance .....	4-365
951. Large, Turbine-Powered Transport Category Airplane Performance .....	4-369
953. Performance Rules for Large Nontransport Airplanes .....	4-377
955. Rules for Release of Commuter Category Airplanes .....	4-379
957. Small Transport Category Airplanes Operated Under Part 135 .....	4-381
959. Small, Nontransport Category Airplanes with 10 to 19 Passenger Seats and Up to 12,500 MTOW .....	4-381
961. Rules for Release of SFAR 411(b) Airplanes .....	4-383
963. Rules for Release of Small, Normal Category Airplanes with Less than 10 Seats .....	4-383
964.-974. Reserved .....	4-385

981. Simplified Data Method .....	4-410
983. Real Time Method .....	4-411
985. Evaluation of an Operator's System .....	4-411
986.-996. Reserved .....	4-412

#### Section 4. AIRPORT DATA ACQUISITION SYSTEMS

997. General .....	4-435
999. Obstacle Data Sources .....	4-435
1001. Approval of Data Acquisition Systems .....	4-436
1002.-1012. Reserved .....	4-437

#### Section 5. SELECTED PRACTICES

1013. General .....	4-459
1015. Non-Transport Category Airplane Operating Limitations .....	4-459
1017. Approval of Drift-Down and Fuel-Dumping Procedures .....	4-459
1019. En Route Operations with Landing Gear Extended .....	4-460
1021. High-Speed Taxi Starts with One Powerplant Inoperative .....	4-460
1023. Approval of Unpaved Runways for Turbojet Operations .....	4-460
1025. Air Carrier Winter Operations .....	4-460
1027. Deviation for Obstacle Clearance Data for Certain Turbojet Airplanes in Part 135 Operations .....	4-461
1028.-1064. Reserved .....	4-462

### CHAPTER 4. MINIMUM EQUIPMENT LISTS (MEL's) AND CONFIGURATION DEVIATION LISTS (CDL's) (TBD)\*

1065.-1334. Reserved .....	4-561
----------------------------	-------

1335.	Introduction .....	4-759
1337.	Operators Requiring Air Ambulance OpSpecs Paragraphs .....	4-759
1339.	Definitions .....	4-760
1341.	Overview of Helicopter Air Ambulance Services .....	4-760
1343.	Overview of Airplane Air Ambulance Services .....	4-761
1344.-1354.	Reserved .....	4-762

## Section 2. AUTHORIZATIONS FOR PART 135 AIR AMBULANCE SERVICES

1355.	General .....	4-775
1357.	Existing Operators Initiating Air Ambulance Operations .....	4-775
1358.-1368.	Reserved .....	4-776

## Section 3. AIR AMBULANCE SERVICE OPERATIONAL PROCEDURES

1369.	General .....	4-789
1371.	Administrative Procedures .....	4-789
1373.	Pre-flight Planning .....	4-790
1375.	Inflight Procedures .....	4-790
1377.	Emergency Procedures .....	4-791
1379.	Servicing of Aircraft With Patients On Board .....	4-791
1381.	Postflight Procedures .....	4-792
1382.-1392.	Reserved .....	4-792

## Section 4. AIR AMBULANCE SERVICE TRAINING PROGRAMS

1393.	General .....	4-805
1395.	Helicopter Training Programs .....	4-805
1397.	Airplane Training Programs .....	4-805
1399.	Medical Personnel and Flightcrew Coordination Training .....	4-806
1400.-1460.	Reserved .....	4-806

1463.	Airborne Thunderstorm Detection Equipment Requirements for Part 135 Operations . . . . .	4-869
1465.	Passenger Occupancy of a Pilot Seat . . . . .	4-869
1466.-1532.	Reserved . . . . .	4-870

## CHAPTER 7. ROTORCRAFT AUTHORIZATIONS AND LIMITATIONS

## Section 1. IFR OFFSHORE OPERATIONS

1533.	Introduction . . . . .	4-941
1535.	General . . . . .	4-941
1537.	Application Process for Helicopter IFR Offshore Operations . . . . .	4-941
1539.	Specific Operator Requirements and Procedures . . . . .	4-941
1541.	Geographic Coordination . . . . .	4-942
1542.-1552.	Reserved . . . . .	4-942

## Section 2. HELICOPTER EN ROUTE DESCENT AREA (HEDA's)

1553. General	4-949
1555. Request for Approval of HEDA	4-949
1557. District Office Approval Procedures	4-949
1559. HEDA Pictorial and Plan View Criteria	4-950
1560.-1570. Reserved	4-950

### Section 3. OFFSHORE INSTRUMENT APPROACH PROCEDURES

1571. General	4-961
1573. Approach Approval Procedures	4-961
1574.-1584. Reserved	4-961

will issue operations specifications (OpSpecs) paragraph C56 to Part 121 operators and OpSpecs paragraph C57 to Part 135 operators. These OpSpecs contain specific guidance regarding pilots, aircraft, and airports when lower-than-standard takeoff minimums are used (see figures 4.2.7.1. and 4.2.7.2.).

**647. TRAINING.** POI's shall ensure that operators requesting lower-than-standard takeoff minimums provide training to their personnel in all procedures contained in the OpSpecs. In addition, the operator's training program must contain at least the following, as applicable:

- Rejected takeoffs in a low visibility environment
- Engine failure at  $V_1$  in low visibility
- Taxiing in a low visibility environment with emphasis on preventing runway incursion

- Procedures for operators not using dispatch systems
- Required ground-based visual aids (such as stop bars, taxiholding position lights)
- Required ground-based electronic aids (such as ILS/MLS transmissometers)
- Determination of takeoff alternate airports, as applicable

**NOTE:** POI's should be aware that there may be additional limitations and guidance for specific airplanes in Flight Standardization Board (FSB) reports and air carrier information bulletins (ACOB's), such as SA 226/227.

**648. - 658. RESERVED.**

be used for all takeoff operations on that runway. All takeoff operations, based on RVR, must use RVR reports from the locations along the runway specified in this paragraph.

a. When a takeoff minimum is not published, the certificate holder may use the applicable standard takeoff minimum and any lower-than-standard takeoff minimums authorized by these operations specifications. When standard takeoff minimums or greater are used, the Touchdown Zone RVR report, if available, is controlling.

b. When a published takeoff minimum is greater than the applicable standard takeoff minimum and an alternate procedure (such as a minimum climb gradient compatible with aircraft capabilities) is not prescribed, the certificate holder shall not use a takeoff minimum lower than the published minimum. The Touchdown Zone RVR report, if available, is controlling.

c. When takeoff minimums are equal to or less than the applicable standard takeoff minimum, the certificate holder is authorized to use the lower-than-standard takeoff minimum described below:

(1) Visibility or RVV 1/4 statute mile or Touchdown Zone RVR 1600, provided at least one of the following visual aids is available. The Touchdown Zone RVR report, if available, is controlling. The Mid RVR report may be substituted for the Touchdown Zone RVR report if the Touchdown Zone RVR report is not available.

(a) Operative high intensity runway lights (HIRL).

(b) Operative runway centerline lights (CL).

(c) Runway centerline marking (RCLM).

(d) In circumstances when none of the above visual aids are available, visibility or RVV 1/4 statute mile may still be used, provided other runway markings or runway lighting provide pilots with adequate visual reference to continuously identify the takeoff surface and maintain directional control throughout the takeoff run.

(2) Touchdown Zone RVR 1200 (beginning of takeoff run) and Rollout RVR 1000, provided all of the following visual aids and RVR equipment are available. The Mid RVR report may be substituted for the Touchdown Zone RVR report if the Touchdown Zone RVR report is not available.

(a) Operative runway centerline lights (CL).



(c) Touchdown Zone RVR 600 (beginning of takeoff run), Mid RVR 600, and Rollout RVR 600, provided all of the following visual aids and RVR equipment are available.

(a) Operative runway centerline lights (CL).

(b) Runway centerline markings (RCLM).

(c) Operative Touchdown Zone and Rollout RVR reporting systems serving the runway to be used, both of which are controlling, or three RVR reporting systems serving the runway to be used, all of which are controlling. However, if one of the three RVR reporting systems has failed, a takeoff is authorized, provided the remaining two RVR values are at or above the appropriate takeoff minimum as listed in this subparagraph.

(d) At foreign airports which have runway lighting systems equivalent to U.S. standards, takeoff is authorized with a reported Touchdown Zone RVR of 175 meters, Mid RVR of 175 meters, and Rollout RVR of 175 meters. At foreign airports where reported RVR values are in 50 meter increments, takeoff is authorized with a reported Touchdown Zone RVR of 200 meters, Mid RVR of 200 meters, and Rollout RVR of 150 meters. At those airports where it has been determined that the runway lighting system is not equivalent to U.S. standards, the minimums in subparagraphs c.(1) or (2), as appropriate, apply.

be used for all takeoff operations on that runway. All takeoff operations, based on RVR, must use RVR reports from the locations along the runway specified in this paragraph.

a. When a takeoff minimum is not published, the certificate holder may use the applicable standard takeoff minimum and any lower-than-standard takeoff minimums authorized by these operations specifications. When standard takeoff minimums or greater are used, the Touchdown Zone RVR report, if available, is controlling.

b. When a published takeoff minimum is greater than the applicable standard takeoff minimum and an alternate procedure (such as a minimum climb gradient compatible with aircraft capabilities) is not prescribed, the certificate holder shall not use a takeoff minimum lower than the published minimum. The Touchdown Zone RVR report, if available, is controlling.

c. When takeoff minimums are equal to or less than the applicable standard takeoff minimum, the certificate holder is authorized to use a takeoff minimum equal to the lowest authorized straight-in Category I IFR landing minimum applicable to the certificate holder for that particular airport. The Touchdown Zone RVR report, if available, is controlling.

d. When takeoff minimums are equal to or less than the applicable standard takeoff minimum and the operation is conducted in compliance with the provisions and limitations of subparagraph e., the certificate holder is authorized to use the lower-than-standard minimums described below.

(1) Visibility or RVV 1/4 statute mile or Touchdown Zone RVR 1600, provided at least one of the following visual aids is available. The Touchdown Zone RVR report, if available, is controlling. The Mid RVR report may be substituted for the Touchdown Zone RVR report if the Touchdown Zone RVR report is not available.

(a) Operative high intensity runway lights (HIRL).

(b) Operative runway centerline lights (CL).

(c) Runway centerline marking (RCLM).

(d) In circumstances when none of the above visual aids are available, visibility or RVV 1/4 statute mile may still be used, provided other runway markings or runway lighting provide pilots with adequate visual reference to continuously identify the takeoff surface and maintain directional control throughout the takeoff run.

(a) Operative runway centerline lights (CL).

(b) Two operative RVR reporting systems serving the runway to be used, both of which are required and controlling.

(3) Touchdown Zone RVR 600 (beginning of takeoff run), Mid RVR 600, and Rollout RVR 600, provided all of the following visual aids and RVR equipment are available:

(a) Operative runway centerline lights (CL).

(b) Runway centerline markings (RCLM).

(c) Operative Touchdown Zone and Rollout RVR reporting systems serving the runway to be used, both of which are controlling, or three RVR reporting systems serving the runway to be used, all of which are controlling. However, if one of the three RVR reporting systems has failed, a takeoff is authorized, provided the remaining two RVR values are at or above the appropriate takeoff minimum as listed in this subparagraph.

(4) At foreign airports which have runway lighting systems equivalent to U.S. standards, takeoff is authorized with a reported Touchdown Zone RVR of 175 meters, Mid RVR of 175 meters, and Rollout RVR of 175 meters. At foreign airports where reported RVR values are in 50 meter increments, takeoff is authorized with a reported Touchdown Zone RVR of 200 meters, Mid RVR of 200 meters, and Rollout RVR of 150 meters. At those airports where it has been determined that the runway lighting system is not equivalent to U.S. standards, the minimums in subparagraphs d.(1) or (2), as appropriate, apply.

e. The certificate holder shall conduct all operations using the lower-than-standard takeoff minimums described in subparagraph d. above in compliance with the following limitations:

(1) Each aircraft must be operated with a flightcrew consisting of at least two pilots.

(2) Each pilot station must have operational equipment which displays a reliable indication of the following:

(a) Aircraft pitch and bank information, from a gyroscopic source.

(b) Aircraft heading, from a gyroscopic source.

(e) Altitude.

(3) Each pilot station must have an independent source of power for the equipment required by subparagraphs e.(2)(a) and e.(2)(b).

(4) Each pilot-in-command must have at least 100 hours flight time as pilot-in-command in the specific make and model airplane used under this authorization and must have satisfactorily completed the certificate holder's approved training program for the minimums authorized by subparagraph d. which includes the methods to be used to ensure compliance with the performance limitations in subparagraph e.(6), when appropriate.

(5) Any second-in-command authorized by the certificate holder to manipulate the flight controls during takeoff (using the minimums authorized by subparagraph d.) must have at least 100 hours flight time as a pilot in the specific make and model airplane and must have satisfactorily completed the certificate holder's approved training program for those minimums.

(6) For takeoffs when the RVR is less than Touchdown Zone RVR 1200 and Rollout RVR 1000, each airplane used must be operated at a takeoff weight which permits the airplane to achieve the performance equivalent to the takeoff performance specified in FAR 135.367 for reciprocating powered airplane, FAR 135.379 for turbine powered airplanes, or FAR 135.398 for commuter category airplanes.

---

[PAGES 4-287 THROUGH 4-298 RESERVED]

[PAGES 4-300 THROUGH 4-320 RESERVED]



(OpSpecs) paragraph C64. Part 121 and Part 135 operators occasionally require special terminal instrument procedures tailored to their specific operations which are not available to the general public. This section contains direction and guidance to be used by principal operations inspectors (POI's) concerning the authorization of special terminal instrument approach or departure procedures for Part 121 and Part 135 operators.

**NOTE:** A special terminal instrument approach procedure is approved by the regional flight standards division (RFSD) that has jurisdiction over the airport or heliport for which a special terminal instrument procedure is requested. Authorization to use the approved special terminal instrument procedure, however, is granted by the POI after coordination with the RFSD, the regional flight procedures branch (FPB), and the appropriate flight inspection field office (FIFO).

**673. BACKGROUND.** A discussion of special terminal instrument procedures would not be complete without a description of standard (published) terminal instrument procedures. The development of standard terminal instrument procedures and special terminal instrument procedures are as follows:

*A. Standard Terminal Instrument Procedures (Published).* The FAA establishes published instrument approach procedures, takeoff and landing weather minimums, and departure procedures under the provisions of Part 97. The FAA determines the need to establish an instrument approach procedure at an airport and then evaluates departures from all runways, the approach, and the missed approach, based on the obstacle clearance requirements for the procedures. For this evaluation, the FAA uses Order 8260.3B, "The United States Standard for Terminal Instrument Procedures (TERPS)," as the standard for the evaluation. The standard terminal instrument procedures

available to the public, but is developed solely for the operator. These special procedures are developed at an operator's request so that the operator may conduct scheduled or nonscheduled passenger or cargo operations in IFR conditions where published standard terminal instrument procedures are inappropriate or unavailable.

**NOTE:** The development of published standard terminal instrument procedures is generally a higher priority than the development of special terminal instrument procedures. POI's should be aware that a minimum of 1 year lead time is recommended for any special terminal instrument procedure development.

#### **675. AUTHORITY AND RESPONSIBILITY FOR SPECIAL TERMINAL INSTRUMENT PROCEDURES.**

*A. Regional Flight Standards Division (RFSD).* A special terminal instrument procedure is the responsibility of, and is approved by, the RFSD that has jurisdiction over the airport or heliport where the procedure is requested.

*B. Regional Flight Procedures Branch (FPB).* This branch determines procedural development requirements and oversees the development and implementation of the special terminal instrument procedure.

*C. Flight Inspection Field Office (FIFO).* At the request of the FPB, the FIFO develops the special terminal instrument procedure by using the TERPS standards, checking the navigational aids used in the approach, verifying controlling obstructions, and by certifying the feasibility of flying the approach by flight inspection aircraft. Although the FIFO develops and approves the technical aspects of the special terminal instrument procedure, close coordination with the FPB is required.

*D. Flight Standards District Office (FSDO).* The POI gives separate authorization for the initial implementation,

**677. SPECIAL PROCEDURES.** Occasionally, an air carrier may have a requirement for terminal instrument arrival or departure procedures that cannot, or should not, be established as published procedures. These special procedures would be requested for situations that involve private ownership of a NAVAID, use of unique terminal instrument procedures based on a specific aircraft type, or for airports without any published procedures. The POI shall receive and review requests for these special procedures from the air carrier and coordinate with other FAA offices that will develop and approve the procedures as previously stated in paragraph 675. If the FPB is outside of the POI's region, the request should be forwarded through both the POI's flight standards division and the servicing region's flight standards division. This request should include a route slip or cover letter containing the POI's name and telephone number and any other pertinent information, such as the POI's evaluation.

**679. POI AUTHORIZATION FOR OPERATOR USE OF A SPECIAL TERMINAL INSTRUMENT PROCEDURE.**

In some instances, the POI may participate in meetings concerning inflight demonstrations or collect information. In addition to the actual authorization, the POI's primary responsibility is to review the special terminal instrument procedure and to determine if any additional distinct qualifications are needed to enhance public safety, such as special training, more frequent evaluations, and extra flight checks.

**A. Initial Contact.** The operator requesting a special terminal instrument procedure shall apply directly to the operator's assigned POI. The operator's request may be only to use an already existing special terminal instrument procedure, or it may involve application for new procedures using sophisticated on-board navigational systems. The POI should inform the operator that the request should contain as much detail and justification as possible to expedite the initial evaluation and to complete the

**B. POI Evaluation.** The POI shall determine the operator's need for using the special terminal instrument procedure in the request. The POI should evaluate the request based upon the equipment being used, the capabilities of the aircraft, a personal knowledge of the operator, and upon the guidance established in this handbook. The POI should discuss any questions the POI may have about the request with the operator. The regional FPB is available to the POI to answer policy or procedural development questions. It is the responsibility of the FAA to design and approve any special departure. IFR takeoff minimums are determined based on TERPS criteria and obstacles in the airport area. IFR departure procedures shall also be developed if the procedures are required according to TERPS criteria. To assist in developing the procedure, the POI should send any specific flight information or operating procedures with the request to the region.

(1) The POI or the inspector should monitor any operator-conducted validation tests required for a special terminal instrument procedure. The POI must ensure that the operator's approved training program and operations manual contains any special training and/or procedural limitations that relate to the special terminal instrument procedure before the procedure is authorized. The POI should carefully examine the limitations stated on FAA Form 8260-7, "Special Instrument Approach Procedure" (see figure 4.2.9.1.), or on any accompanying documentation, waivers, or recommendations from the region.

(2) Special terminal instrument procedures can be authorized for both airplanes and helicopter operations. Paragraph C64, "Special Terminal Area IFR Operations- Authorizations, Limitations, and Provisions" is the relevant paragraph that should address the special approach procedure authorized, including revision number, the specific type of aircraft authorized to conduct the approach, and any special limitations required for air carrier operations.



special terminal instrument procedure for both airplanes and helicopters.

(4) The POI should send to the operator the signed, FAA Form 8260-7, any changes to the OpSpecs, and a cover letter containing an explanation of any special requirements attached to the authorization. Other documentation sent to the POI from the region may be discussed with the operator, but should not be sent to the operator. Any extra documentation the POI receives should be maintained at the FSDO for that operator. A copy of the signed FAA Form 8260-7 should also be forwarded to the POI's RFSD.

**NOTE: The federal government does not chart special terminal instrument procedures and the charting requirements must be developed for the specific user by commercial charting sources.**

*C. Revisions to Special Terminal Instrument Procedures.* Standard terminal instrument procedures and special terminal instrument procedures are reviewed annually; therefore, special terminal instrument procedures will be periodically revised and the regional office will send the new FAA Form 8260-7, "Special Instrument Approach Procedure" to the POI. The POI will sign the form, change the OpSpecs to denote the new amendment number, and send both documents to the operator. The POI is also responsible for updating the regional list of operators authorized to use special terminal instrument procedures. This list must be updated whenever an operator surrenders a certificate or informs the POI that the special terminal instrument procedure authorization is no longer required.

**681. PRACTICES AND POLICIES FOR IFR DEPARTURE PROCEDURES.** The FAA publishes Part 97 IFR takeoff minimums and departure procedures for airports having published instrument approach procedures. For

procedures from airports without an approach procedure.

**683. FLIGHT PROCEDURES STANDARDS WAIVER TO SPECIAL TERMINAL INSTRUMENT PROCEDURES.** Specifically requested procedure design needs and TERPS application criteria dictate the finished product of a flight procedures standards waiver. If use of nonstandard criteria is required, a procedures waiver showing an equivalent level of safety will be processed in accordance with TERPS. FAA Form 8260-1, "Flight Procedures Standards Waiver," is used. TERPS waivers require Headquarters Flight Standards approval. This waiver is initiated by the RFSD. During waiver initiation and review, the POI may be contacted to provide input concerning such items as the air carrier's training program and pilot proficiency. In addition, the POI may contribute expert opinion in the evaluation of safety or performance requirements, or for any other issues concerning flight procedures standards waivers to the special terminal instrument procedures. A copy of the waiver form shall be forwarded to the POI with the finished special terminal instrument procedure. The procedures waiver may contain provisions which require POI actions prior to authorizing the air carrier's use of the special procedure.

**685. PROVISIONAL AUTHORIZATIONS.** Those special terminal instrument procedures serving an airport listed in AC 121.445-1 (as amended), "Pilot-In-Command Qualifications For Special Areas/Routes and Airports," require the performance of an inflight validation test by the operator. If the airport served is not listed in AC 121.445-1, the POI may issue a provisional authorization allowing an operator to conduct a special terminal instrument procedure without inflight validation tests. This provisional authorization should not exceed 30 days and is used to allow an FAA operations inspector to evaluate the special terminal instrument procedure during routine operations. The provisional authorization should only be used after a careful evaluation has been made of the special terminal instrument procedure for safety related factors.

Based on the requirements of FAR 135.215(d), the operator must provide the POI with sufficient justification to determine that the IFR departure from the non-instrumented airport is necessary and that the proposed operation can be safely conducted. The authorization to operate at a non-instrumented airport does not include authorization to make an IFR approach to that airport.

region's FPB maintains a list of authorized users of its special terminal instrument procedures and will inform the POI's district office by message when these situations occur. The POI is responsible for promptly informing the operator of the affected special terminal instrument procedure.

**690. - 900. RESERVED.**

AIR CARRIER NOTES

The procedure on the other side and the foregoing data are hereby:

FLIGHT CHECKED BY

NAME

DATE

FIFO

DEVELOPED BY

APPROVED BY

SIGNATURE

DATE

SIGNATURE

DATE

FIFO

REGION, FLIGHT STANDARDS DIVISION

OPERATIONS SPECIFICATIONS - AIRPORT

\_\_\_\_\_ holding Air Carrier Operating Certificate No. \_\_\_\_\_  
hereby acknowledges receipt of Operations Specifications to operate into and out of the airport named on the other side as a ☐ Regular.  
☐ Refueling, ☐ Alternate, ☐ Provisional for \_\_\_\_\_ airport with the follow-  
ing type aircraft:

Unless otherwise authorized in the Operations Specifications-Airport, an instrument approach of this type shall be conducted in accordance with the procedure specified on the other side and the air carrier minimums specified above with the following exceptions:

DATE \_\_\_\_\_ RECEIVED FOR THE  
AIR CARRIER BY \_\_\_\_\_  
Signature

AMENDMENT NO. \_\_\_\_\_  
Title

Approved and made a part of the Operations-Specifications of the above-named carrier. The amendment supersedes any previous Operations Specifications-Airport of this type and procedure number approved for this Airport.

BY DIRECTION OF THE ADMINISTRATOR \_\_\_\_\_  
Signature  
EFFECTIVE DATE \_\_\_\_\_  
Title

GPO 905-043

AIR CARRIER NOTES			
The procedure on the other side and the foregoing data are hereby:			
FLIGHT CHECKED BY			
NAME		DATE	
FIFO		FIFO	
DEVELOPED BY		APPROVED BY	
SIGNATURE	DATE	SIGNATURE	DATE
FIFO		REGION, FLIGHT STANDARDS DIVISION	
OPERATIONS SPECIFICATIONS - AIRPORT			
<p>_____ holding Air Carrier Operating Certificate No. _____</p> <p>hereby acknowledges receipt of Operations Specifications to operate into and out of the airport named on the other side as a <input type="checkbox"/> Regular.</p> <p><input type="checkbox"/> Refueling, <input type="checkbox"/> Alternate, <input type="checkbox"/> Provisional for _____ airport with the following type aircraft:</p> <p>Unless otherwise authorized in the Operations Specifications-Airport, an instrument approach of this type shall be conducted in accordance with the procedure specified on the other side and the air carrier minimums specified above with the following exceptions:</p>  <p>DATE _____ RECEIVED FOR THE AIR CARRIER BY _____</p> <p style="text-align: right; margin-right: 100px;"><i>Signature</i></p> <hr/> <p>AMENDMENT NO. _____</p> <p style="text-align: right; margin-right: 100px;"><i>Title</i></p> <hr/> <p>Approved and made a part of the Operations-Specifications of the above-named carrier. The amendment supersedes any previous Operations Specifications-Airport of this type and procedure number approved for this Airport.</p> <p style="text-align: center;">BY DIRECTION OF THE ADMINISTRATOR _____</p> <p style="text-align: right; margin-right: 100px;"><i>Signature</i></p> <hr/> <p>EFFECTIVE DATE _____</p> <p style="text-align: right; margin-right: 100px;"><i>Title</i></p>			

GPC 905-043

[PAGES 4-327 THROUGH 4-330 RESERVED]

**1015. NON-TRANSPORT CATEGORY AIRPLANE OPERATING LIMITATIONS.** FAR 121.157 prohibits operators from using large airplanes certified after June 30, 1942 in revenue service unless the airplanes are certified in the transport category. Both Part 121 and 135 operators may, however, use in revenue service large airplanes that were certified prior to July 1, 1942. These airplanes are termed "large, non-transport category airplanes." Very few types of large, non-transport category airplanes remain in active revenue service. A few operators continue to operate the DC-3, the C-46, and the Lockheed 18.

*A. Airplanes Recertified in the Transport Category.* Some airplanes which were originally certified before July 1, 1942 have subsequently been modified and recertified in the transport category. Operators may only use C-46 type airplanes certified in the transport category in passenger-carrying operations. When an operator operates one of these airplanes in Part 121 or 135 service, the operator must show compliance with FAR 121.199 through 121.205 or FAR 135.389 through FAR 135.395 by means of data approved in the type certification process.

*B. Non-Transport Category Airplanes.* Operators using large, non-transport category airplanes must show compliance with the performance requirements of FAR's 121.199 through 121.205 with data that has been approved by the Administrator. Operators must keep the data in the airplane in a place conveniently accessible to the pilot while the airplane is in flight.

*C. C-46 Cargo-Only Operations.* Operators using C-46 type airplanes in cargo-only operations may use data extracted from Appendix C of FAR 121 to show compliance with the requirements of FAR's 121.157, 121.199, 121.201, 121.203, and 121.205.

**1017. APPROVAL OF DRIFT-DOWN AND FUEL-DUMPING PROCEDURES.** Operators may request FAA approval of drift-down or fuel dumping to show compliance with FAR terrain clearance requirements. The POI may approve the drift-down and fuel dumping procedures in accordance with the guidance of this paragraph.

*A. Approval Procedures.* POI's should grant approval of drift-down and fuel dumping procedures by means of a nonstandard paragraph in Part B of the operations specifications (OpSpecs). The POI may enter the entire procedure into the OpSpecs paragraph. The preferred procedure, however, is for the POI to enter a reference to the section of the operator's general operations manual (GOM) which contains the procedure, the limitations, and the data.

*B. Drift-Down Data and Procedures.*

(1) Operators should base their proposals on manufacturer data and recommended procedures. In the absence of such data and procedures, the operator must develop the necessary data and procedures.

(2) The POI should require the operator that creates drift-down procedures to validate the procedures and data through validation tests.

(3) Because of the complexities involved, the POI should coordinate with the regional flight standards division (RFSD) and the aircraft evaluation group (AEG).

(4) The POI should also request that the RFSD coordinate the operator's proposal with air traffic control (ATC) to avoid possible air traffic conflicts.

*C. Training Programs and Manuals.* When the operator adopts drift-down or fuel dumping procedures, the proce-

first situation, the operator may seek approval to dispatch an aircraft with the landing gear secured in the down position. In the second situation, the flightcrew may not be able to retract the landing gear after takeoff. In most circumstances, an operator cannot comply with the performance requirements of Part 121, Subpart I or Part 135, Subpart I when the landing gear cannot be retracted after takeoff. The PIC of such a flight is normally forced to return to the departure airport or to divert to a takeoff alternate airport. Operators may, however, operate a revenue flight with the gear down when the operator can show compliance with regulatory requirements. POI's should review the following:

A. *Procedures and Data.* Operators must provide flight crewmembers with procedures and approved airplane performance data for gear extended operations. The procedures must include speed limitations and fuel consumption data sufficient to show compliance with regulatory requirements. POI's should ensure that the operator has included this information in the operator's company flight manual (CFM). Instruction on procedures must be included in the operator's training program.

B. *Amended Release.* POI's should verify that the operator's GOM contains adequate direction and guidance to both PIC's and flight control personnel for amending the dispatch or flight release. POI's should coordinate review of manual material with the principal maintenance inspector (PMI).

**1021. HIGH-SPEED TAXI STARTS WITH ONE POWER-PLANT INOPERATIVE.** Flight Standards Service (FSS) safety policy is not to accept high-speed taxi start procedures due to the increased risk involved with these operations. When an operator makes a compelling case for approval for such procedures, the POI should coordinate with AFS-200 through the RFSD.

Part 121 operators. Airport requirements for Part 135 operators are contained in FAR 135.229.

A. *Approval of Landing Surface.* POI's must approve the use of an unpaved runway surface for turbojet operations. Approval for this type of operation must be based on actual flight test performance data acceptable to the responsible aircraft certification group, the AEG, and flight test engineering. Before the POI approves turbojet operations at any airport with other than paved runways, the POI will determine that the following conditions are met:

(1) Takeoff and landing field lengths must be based on approved flight test data for the particular type aircraft on the type of runway surface to be used.

(2) Flight testing must show that foreign object ingestion into the engines and gravel impingement upon the aircraft structure are not significant factors.

(3) The surface of the runway to be used must be reasonably stable throughout the various weather seasons; otherwise, the operations must be restricted to particular seasons.

B. *Approval Procedures.* An airport with unpaved runways is required to have special operational procedures and flight crewmember training. Approval of operations at an airport with unpaved runways is granted in OpSpecs paragraph C67. POI's may reference the appropriate section of the operator's manuals in paragraph C67.

**1025. AIR CARRIER WINTER OPERATIONS.** This paragraph contains guidance to be used by inspectors for reviewing those portions of manuals, procedures, and training programs concerning operations in winter weather conditions. The POI must ensure that the operator's manuals contain specific instructions and information to flightcrews for operating each type of aircraft operated in

require additional criteria.

- The requirement for a thorough preflight inspection in extreme temperatures
- A description of the performance and control problems that would differ from normal conditions during takeoff and landing with water, slush, or wet snow on the runway
- The speed, weight, and runway length adjustments that would be made when operating on contaminated runways
- Criteria for takeoff, en route, and destination weather conditions
- The causes and effects to the aircraft from hydroplaning or aquaplaning
- The effects of increased viscosity of fluids in cold temperatures
- Adverse effect of cold temperatures on hydraulic fittings and seals
- The effects of cold weather conditions to fuel pumps and fuel filter drains
- Fuel contamination, fuel leaks caused by cold weather operations
- The hazards associated with wet snow or slush in wheel wells when entering freezing temperatures
- Techniques and procedures for braking, steering, and reversing with water, slush or snow on taxiways and runways

**B. Pertinent References.** Inspectors should be aware of the following advisory circulars and booklet, and should bring them to the attention of operators:

- AC 91-13, "Cold Weather Operation of Aircraft"; for discussion of aircraft cold weather preparation and operations
- AC 91-6, "Water, Slush, and Snow on the Runway"; for guidelines concerning the operation of turbojet aircraft with water, slush, wet or dry snow on runways
- AC 135-9, "FAR Part 135 Icing Limits"; for guidance concerning compliance with FAR 135.227
- AC 91-51, "Airplane Deice and Anti-Ice Systems"; for information on ice protection system approval and the results of inflight icing
- "Winter Operations Guidance for Air Carriers"; booklet prepared by FSS

**1027. DEVIATION FOR OBSTACLE CLEARANCE DATA FOR CERTAIN TURBOJET AIRPLANES IN PART 135 OPERATIONS.** This paragraph contains direction and guidance to be used by POI's when issuing operators of certain transport category airplanes a deviation to FAR 135.367(a)(3) or FAR 135.379(d).

**A. Background.** FAR 135.367(a)(3) and FAR 135.379(d) require Part 135 operators of transport category airplanes to acquire airport obstacle data and compute obstacle clearance limited takeoff weights.

(1) FAR 135.363(h) authorizes the FAA Administrator to issue deviations to Subpart I of Part 135 if "special

no record of accidents caused by contact with obstacles around departure runways either with or without an engine failure. Further, transport category airplanes have more stringent engine-out climb performance requirements than do airplanes certified in the normal category. Consequently, FSS has determined that, under limited conditions, there is no degradation in the level of safety provided when transport category airplanes (with up to 19,000 pounds MTOW or 19 passenger seats) are operated without complying with these rules.

B. *Conditions of the Deviation.* The operator is authorized to conduct takeoff operations using transport category airplanes weighing no more than 19,000 pounds and having a seating configuration of no more than 19 passenger seats without showing compliance with FAR 135.367(a)(3) and FAR 135.379(d). This authorization is limited to only the following operations conducted:

straight-in Category I landing minimums for the runway being used

C. *Method of Granting the Deviation.* The POI should ensure that the operator has included the limitations of this deviation in the operator's GOM. The operator must also provide direction and guidance concerning how to obtain obstacle data and compute obstacle clearance performance in the GOM when the limitations of the deviation are not met. The operator must also include these limitations and procedures in the approved training program. When these conditions have been met, the POI may grant approval to the operator for the deviation by placing the text of subparagraph B in paragraph C67 of the operator's OpSpecs.

1028. - 1064. RESERVED.

[PAGES 4-463 THROUGH 4-560 RESERVED]



graph of this section covers an individual practice.

and other regulations have no such requirement.

**1463. AIRBORNE THUNDERSTORM DETECTION EQUIPMENT REQUIREMENTS FOR PART 135 OPERATIONS.** FAR 135.173 requires that passenger-carrying aircraft equipped with 10 or more passenger seats be equipped with either approved thunderstorm detection equipment or approved airborne weather radar.

*A. Exceptions to the Equipment Requirements.*

(1) Helicopters operating in day VFR conditions are excluded from this requirement.

(2) Thunderstorm detection equipment is not required to be installed in aircraft used exclusively within the states of Hawaii or Alaska, and in Canada west of 130 degrees longitude and between 53 degrees and 70 degrees north latitude.

(3) Operators are not required to have equipment installed in an aircraft during any training flights, test flights, or ferry flights.

*B. Authorized Equipment.* FAR 135.173 neither defines nor identifies acceptable thunderstorm detection equipment, but does require that the equipment be approved by the FAA. The FAA has approved airborne weather radar and passive detection equipment, such as lightning detection equipment. Technical Standard Order TSO-C110a, "Airborne Passive Thunderstorm Detection Equipment," establishes the minimum operating performance standards and requirements for thunderstorm detection equipment. Operators may use such systems to fulfill the requirements of FAR 135.173. Principal operations inspectors (POI's) should coordinate with the principal maintenance inspector (PMI) or the principal avionics inspector (PAI) to ensure that the equipment installation is based upon the approved

**1465. PASSENGER OCCUPANCY OF A PILOT SEAT.** A Part 135 operator may operate an aircraft of eight or less passenger seating capacity with a passenger occupying a pilot seat. FAR 135.113, however, prohibits operation of an aircraft certified after October 15, 1971 with a passenger seating capacity of more than eight seats with a passenger occupying a pilot seat.

*A. Aircraft Type Certificated after October 15, 1971.* FAR 135.113 states that no certificate holder may operate an aircraft that was type certificated after October 15, 1971 with a passenger seating configuration of more than eight seats excluding the pilot seat, with anyone occupying a pilot seat except the following:

- The pilot-in-command (PIC)
- The second-in-command (SIC)
- A company check airman
- An authorized representative of the Administrator
- An authorized representative of the United States Postal Service

*B. Aircraft Certificated on or before October 15, 1971.* Operation with a passenger in a second pilot seat was not prohibited until the implementation of FAR 135.113. Certificate holders may operate aircraft that were originally certificated on or before October 15, 1971, with eight or more passenger seats with a passenger occupying a pilot seat. Operators and inspectors should be aware that FAR 135.115 prohibits a PIC from allowing anyone to manipulate the controls except the following:



(POI's) concerning rotorcraft authorizations and limitations. Section 1 contains direction and guidance to POI's for reviewing and approving helicopter IFR offshore operations outside controlled airspace. Section 2 contains direction and guidance to be used by POI's for reviewing and approving helicopter en route descent areas (HEDA's). Section 3 contains direction and guidance to be used by POI's for reviewing and approving airborne radar approach (ARA) procedures and offshore standard approach procedures (OSAP's).

**1535. GENERAL.** IFR operations in any controlled airspace, including offshore, are granted to the operator by paragraph B32 in the operations specifications (OpSpecs). IFR operations in uncontrolled airspace are authorized by paragraph A14. POI's should utilize FAA Order 8400.10, volume 4, chapter 1, section 2 for guidance concerning operators desiring to conduct IFR offshore operations in uncontrolled airspace.

**1537. APPLICATION PROCESS FOR HELICOPTER IFR OFFSHORE OPERATIONS.** Any operator that desires to conduct IFR operations in uncontrolled airspace shall adhere to the following guidelines:

*A. Submission of Proposal.* The operator shall submit, to its certificate-holding district office (CHDO), a letter that describes the proposed operation. The operator's letter should include the following items:

- Specific routes to be flown
- The exact location of the destination
- The proposed type of aircraft
- The navigation equipment on the aircraft

*B. Coordination.* After reviewing the request, the CHDO will arrange a coordination meeting with air traffic elements that will be involved (center, approach control, FSS, etc.). If a navigation aid (NAVAID) exists at the offshore facility, the regional flight procedures branch should also be represented at the coordination meeting.

**1539. SPECIFIC OPERATOR REQUIREMENTS AND PROCEDURES.** Any operator that wishes to be approved for IFR offshore operations must ensure that the following navigation and facility requirements are met:

*A. Route Requirements.* Operators may develop these proposed and specified routes by Class I station-reference navigation where adequate signal coverage is available. Outside of the area where signal coverage is available, the operator must provide a suitable means of Class II navigation. By means of validation tests in VFR conditions, POI's shall ensure that the operator is able to demonstrate adequate navigational performance for these routes before being granted approval to use them.

*B. Terminal Procedures.* One of the two following procedures will be followed for approving terminal-area IFR operations:

(1) *Procedures Based Upon a Class I NAVAID.* The regional flight procedures branch is responsible for the review of the operator's proposed procedures. Appropriate approach plates and operating procedures must be approved by the FAA and then be published in the operator's manual. The POI grants the authorization by creating a non-standard OpSpecs paragraph which refers to the section of the operator's manual containing these procedures.

(2) *Procedures Used When No Terminal NAVAID Facility Exists.* In these cases, the operator must submit a

D. *Weather-Reporting Requirements.* A weather-reporting facility, approved by the National Weather Service (NWS) or FAA, must be present and operable within 10 nautical miles of the destination. A remote source may be approved by the POI (based on the concurrence of the NWS) as a deviation from the provisions of FAR 135.213(b) when the operator can demonstrate an ade-

quate weather source for the geographic area in which operations are to be conducted. The office having geographic responsibility will normally perform route checks and other required inspections and forward reports of these inspections to the POI. When all requirements have been met, the POI will authorize the operator to conduct operations by means of a non-standard OpSpecs paragraph.

1542. - 1552. RESERVED.

[PAGES 4-943 THROUGH 4-948 RESERVED]

operator that desires to establish a HEDA shall submit a written request to its certificate-holding district office (CHDO), which will provide a copy of this request to the flight standards field office in whose geographic area of responsibility the operations are proposed. The letter of request from the operator should include the following items:

- A pictorial and/or written description of the proposed HEDA
- The means by which positive course guidance is to be established
- Equipment requirements for use in the HEDA
- Operations and training manual revisions to incorporate HEDA's, if it is an initial application
- The date of first intended use and the proposed length of service for which authorization is sought

#### **1557. DISTRICT OFFICE APPROVAL PROCEDURES.**

When the CHDO receives an application for a HEDA that involves a flight standards district office (FSDO) outside of its region, the CHDO should immediately contact the other FSDO through the regional flight standards division (RFSD) to ensure a timely implementation of the request. This would include, but not be limited to, the appropriate air traffic division/facility and the RFSD, operations branch, where the operations are proposed. When operations are proposed outside the certificate-holding region, coordination among all concerned parties should be completed before the CHDO issues operations specifications (OpSpecs) or a letter of authorization.

*A. Offshore Operators.* Part 91 offshore operators are required to obtain a letter of authorization from the FSDO for IFR operations. The letter of authorization shall be

*B. Navigational Equipment.* POI's must coordinate with principal avionics inspectors (PAI's) to ensure that the navigational equipment required, including radar altimeter and mapping radar, is appropriately installed and approved for the proposed type of operation. If routes of flight are predicated on the use of an area navigation system (RNAV), the POI must assure compliance with Advisory Circular (AC) 90-45, "Approval of Area Navigation Systems," for use in the U.S. national airspace system.

*C. Coordination with the Procedures Branch.* POI's, in conjunction with a flight inspection procedures specialist, must determine that the proposed HEDA is clear of obstructions and that positive course guidance is available for the entire route, including descent to the lowest authorized altitude (LAA).

*D. Extended Overwater or IFR Operations Equipment.* The POI must determine that all navigation equipment to be used in these operations complies with the requirements of FAR 135.165(b). If positive course guidance for any portion of the route is obtained through the use of long-range navigation equipment (i.e., VLF/OMEGA, LORAN, etc.), two independent receivers for navigation must be installed and be operative before the POI can issue authorization to the operator to use that HEDA.

*E. Issuance of OpSpecs.* When POI's are satisfied that all requirements are met and that appropriate coordination with airworthiness, avionics, and the procedures branch of the FAA has been accomplished, OpSpecs may be issued to the operator.

(1) *Authorization Limit.* OpSpecs authorizing the use of HEDA's are valid for one year from the date of issue. Any operator wishing to obtain HEDA revalidation must submit written confirmation to the POI ensuring that the HEDA is clear of obstructions and that positive course guidance is available. The operator must provide the means

ary areas for HEDA use.

B. *HEDA Dimensions.* HEDA's have the profile of figure 4.7.2.4. and the dimensions of the plan view in figure 4.7.2.5. The descent area begins at the descent fix and ends at the descent altitude fix. This area must be free of obstacles and must be located over water.

C. *Equipment Requirements.* All required flight and

(2) The LAA will be increased to 700 feet as shown in figure 4.7.2.7. with the mapping radar inoperative.

**NOTE: When the radar altimeter is inoperative, altitude will be adjusted upward 5 feet for each mile over 5 miles from the altimeter setting source to the descent altitude fix.**

**1560. - 1570. RESERVED.**

In accordance with your request of (date), (company name) is authorized the use of the following HEDA(s):

1. (description of HEDA)
2. (etc.)

#### Equipment Requirements

In addition to compliance with appropriate Federal Aviation Regulations, an airborne weather and mapping radar and radar altimeter must be installed.

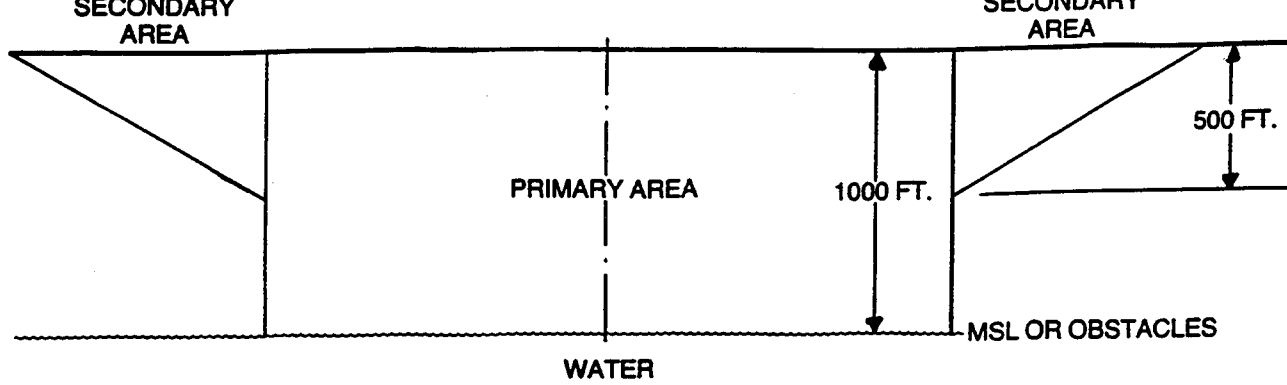
#### Limitations

1. A lowest authorized altitude (LAA) of 400 feet is permitted with all equipment operative.
2. The LAA will be increased to 700 feet with either the mapping radar or radar altimeter inoperative.
3. Altitude will be adjusted upward 5 feet for each mile over 5 miles from the altimeter setting source to the descent altitude fix.
4. If upon reaching the LAA and VFR conditions do not exist, a missed approach in accordance with Air Traffic Letters of Agreement of Air Traffic clearance will be initiated.
5. In the event an unplotted target is displayed in the descent area, descent below 700 feet is not authorized.

Unless sooner recalled or amended, this authorization remains valid while (company name) is conducting operations in the areas described above for 1 year from date of issuance. It is the responsibility of (company name) to assure that the above described HEDA is still in effect. Revalidation of this authorization may be accomplished through written confirmation by (company name) or FAA en route inspection to ensure that the HEDA is clear of obstructions and that positive course guidance for the entire route is available.

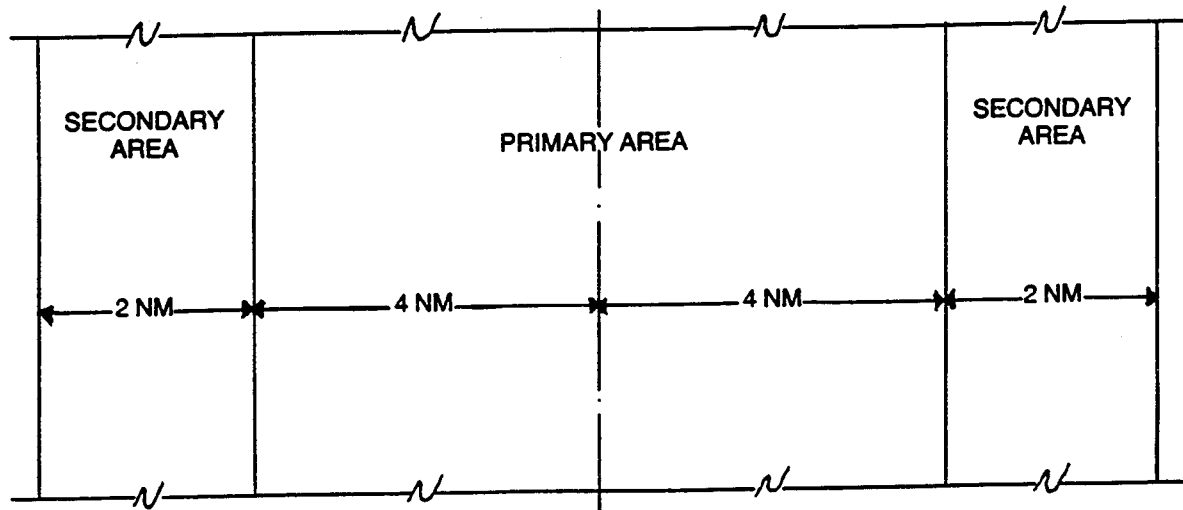
Sincerely,

/s/ Sam Smith  
Manager, AEA-FSDO-62



EN ROUTE PROFILE

FIGURE 4.7.2.3.  
EN ROUTE CRITERIA (PLAN VIEW)



EN ROUTE PLAN VIEW



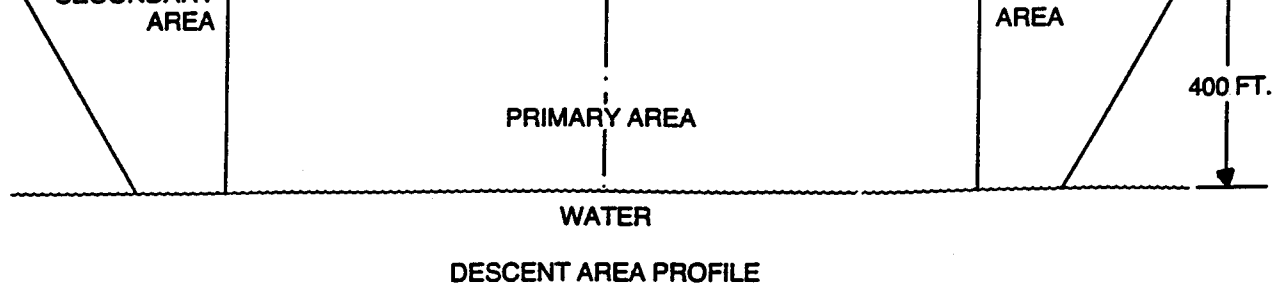
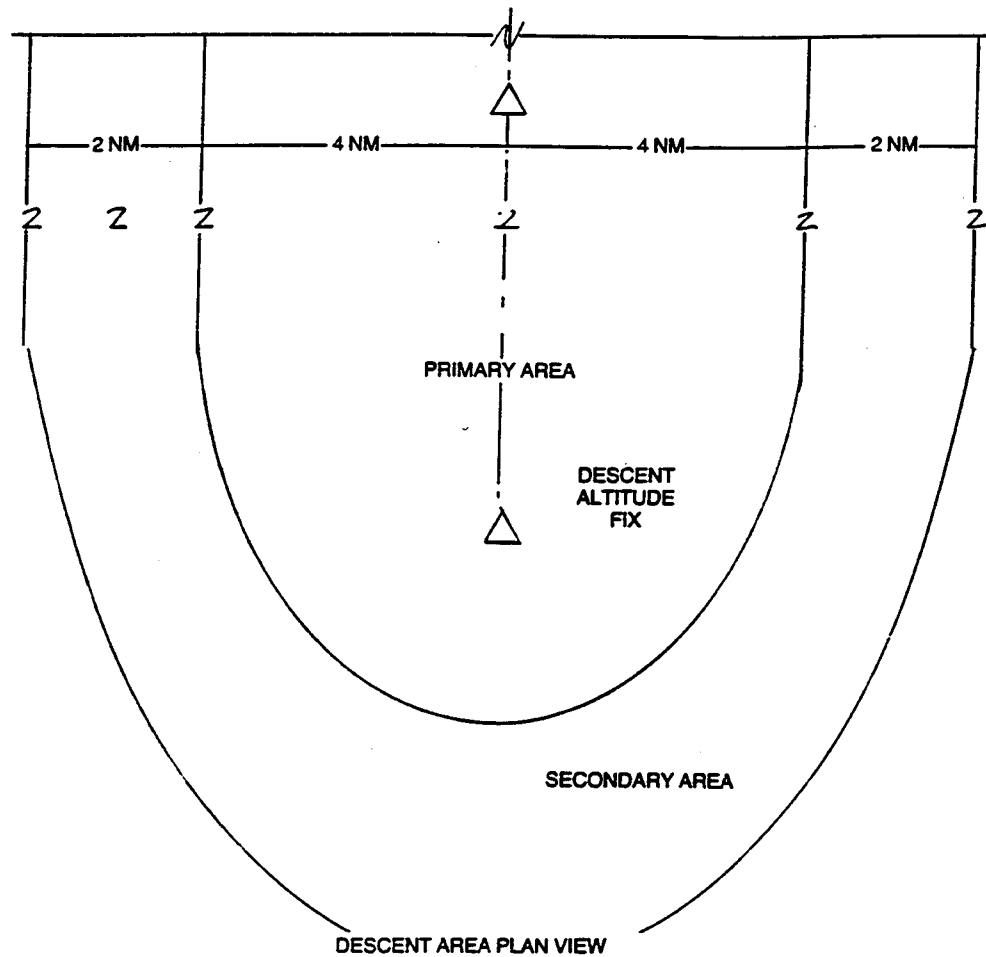
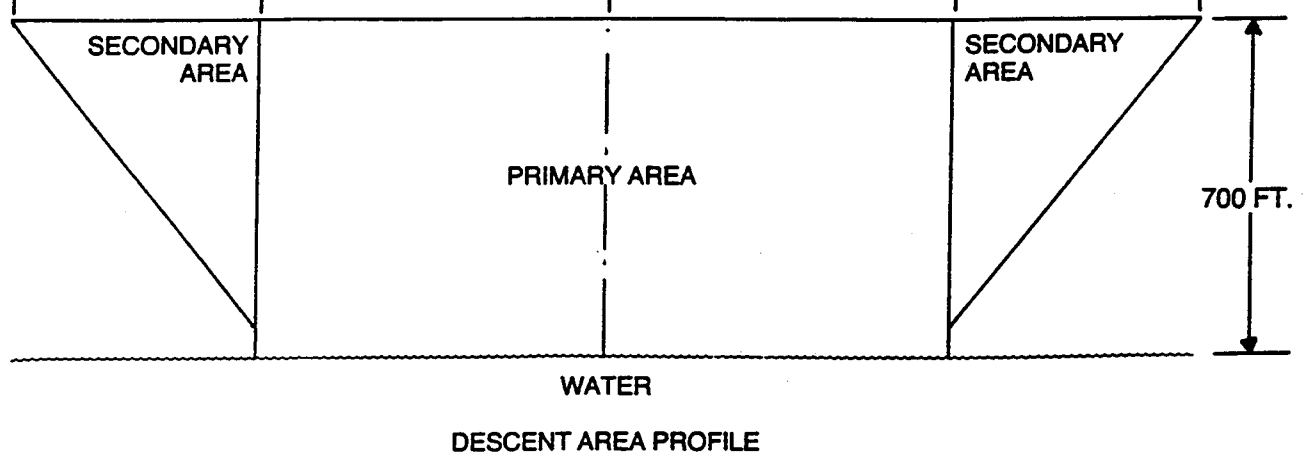


FIGURE 4.7.2.5. HEDA DIMENSIONS (PLAN VIEW)

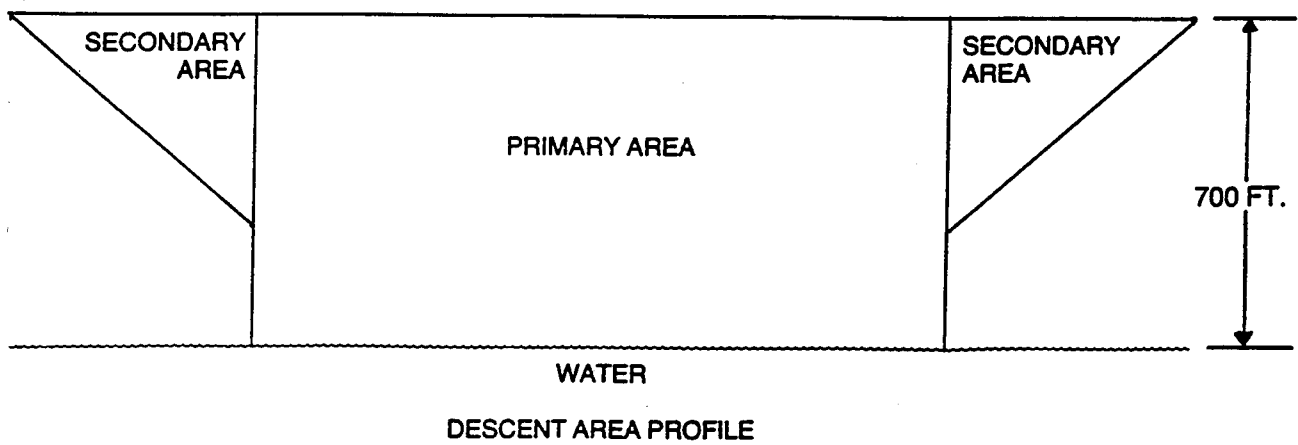




---

**FIGURE 4.7.2.7.**  
**INOPERATIVE EQUIPMENT (MAPPING RADAR INOP)**

---



---

[PAGES 4-955 THROUGH 4-960 RESERVED]

ment to conduct instrument approaches to rigs, platforms or ships that are at least 5 nautical miles offshore in uncontrolled airspace. The helicopter operator will use the airborne radar approaches (ARA's) or the offshore standard approach procedures (OSAP's) for conducting instrument approaches in this environment.

**1573. APPROACH APPROVAL PROCEDURES.** Advisory Circular (AC) 90-80, "Approval of Offshore Helicopter Approaches," contains approval guidance, procedures criteria, and a sample training program for offshore instrument approaches. ARA procedures are special instrument approach procedures approved under the provisions of FAA Order 8260.19, Flight Procedures and Airspace, as amended, and FAA Order 8260.3, U.S. Standards for Terminal Instrument Procedures (TERPS), as amended.

A. *ARA Approval Procedures.* POI's should refer to AC 90-80, which contains one method of approval criteria and a sample training program for ARA's. POI's should also note and adhere to the following ARA approval procedures:

(1) The regional flight inspection and procedures (FIP) staff is responsible for the development and approval of ARA's.

(2) A copy of the proposed ARA procedures shall be forwarded for review to the flight inspection field office (FIFO) that maintains geographic responsibility for the area in which the ARA will be conducted.

(3) The flight standards district office (FSDO) with geographic responsibility for the area in which the ARA

and instrument approach procedures based on demonstration of acceptable performance. The CHDO may need the support of the office having geographic responsibility to observe these demonstrations.

(5) ARA's are documented on FAA Form 8260-7, "Special Instrument Approach Procedures."

(6) The FIP staff should amend the ARA with a pen-and-ink change for minor changes of rig location, provided the en route egress point and procedure name remain the same and the controlling obstacle does not change; otherwise, the FIP staff shall develop a new procedure.

B. *Approval Process for OSAP's.* Helicopter operators that are approved for IFR offshore operations and that desire to conduct OSAP's must do the following:

(1) The operator must submit a written request to the CHDO, according to AC 90-80, as amended.

(2) The POI shall evaluate and test the procedures contained in the request for OSAP approval, according to AC 90-80. The FSDO must approve the operator's OSAP maintenance and training programs before issuing authorization.

(3) The POI shall utilize part H112 of the operations specifications (OpSpecs) to authorize Part 135 operators to conduct OSAP's. For Part 91 operations, the FSDO shall issue a letter of authorization to each Part 91 operator. A sample letter of authorization is contained in Appendix 5 of AC 90-80.

**1574. - 1584. RESERVED.**

[PAGES 4-962 THROUGH 4-966 RESERVED]



1. Applicability .....	5-1
3. Individuals Authorized to Conduct Certification .....	5-1
5. Inspector and Examiner Qualifications .....	5-1
7. Job Aids .....	5-1
9. Surveillance During Certification .....	5-2
11. Inspector Preparation .....	5-2
13. Testing Policies .....	5-2
15. Aircraft Operating Manuals .....	5-3
17. Testing Sequence and Time Limits .....	5-3
18.-26. Reserved .....	5-3

## Section 2. PHASES OF CERTIFICATION

27. Application Phase .....	5-7
28. Verification of Applicant's Identity .....	5-7
29. Instructions for Completing Application Forms .....	5-8
31. Oral Test Phase .....	5-12
33. Flight Test Phase .....	5-13
35. Documentation Phase .....	5-14
37. Temporary Airman's Certificate, FAA Form 8060-4 .....	5-15
39. Notice of Disapproval of Application, FAA Form 8060-5 .....	5-16
41. Completion of FAA Form 8000-36, PTRS Data Sheet .....	5-16
43. District Office Responsibilities .....	5-18
44.-50. Reserved .....	5-18

## CHAPTER 2. AIRLINE TRANSPORT PILOT CERTIFICATES

### Section 1. APPLICATION PHASE - AIRPLANES AND HELICOPTERS

51. Applicability .....	5-37
53. Eligibility for the ATP Written .....	5-37
55. Flight Experience Requirements for the Airplane Category .....	5-38

65. Extending Validity Period of Written Test Results .....	5-42
67. Specific Eligibility Requirements for the Flight Test .....	5-43
69. Specific Eligibility Requirements for the Flight Test .....	5-43
70.-74. Reserved .....	5-43

## Section 2. FLIGHT TEST EVENTS IN AIRPLANES

75. Applicability .....	5-52
77. Oral Test Events .....	5-52
79. Waiver Authority .....	5-52
81. Preparation and Surface Operations Events .....	5-52
83. Takeoff Events .....	5-53
85. Climb, En Route, and Descent Events .....	5-54
87. Approach Events .....	5-56
89. Landing Events .....	5-59
91. Missed Approach Events .....	5-60
93. Normal and Abnormal Procedures .....	5-60
95. Emergency Procedure Events .....	5-61
97. Standards of Acceptable Performance .....	5-61
98.-104. Reserved .....	5-62

## Section 3. CONDUCT OF FLIGHT TESTS IN AIRPLANE FLIGHT SIMULATORS AND TRAINING DEVICES

105. Acceptable Methods for Accomplishing an Airplane Flight Test .....	5-70
107. Selection of Flight Test Job Aids .....	5-70
109. Planning a Simulator or Training Device Flight Test Segment .....	5-71
111. Applicant Briefing .....	5-72
113. Supporting Crewmembers .....	5-72
115. Conducting a Flight Test in a Simulator or Training Device .....	5-72
117. Debriefing .....	5-73
118.-122. Reserved .....	5-73

129. Preflight Briefing .....	5-89
131. Crew Qualifications .....	5-90
133. Vision Restriction Devices .....	5-90
135. Conduct of the Flight Test in an Airplane .....	5-90
137. Safety .....	5-90
139. Modification of Events .....	5-91
141. Debriefing .....	5-91
142.-144. Reserved .....	5-91

## Section 5. ORAL AND FLIGHT TEST EVENTS IN HELICOPTERS

145. Description of Specific Events .....	5-98
147. Waiver or Modification of Flight Test Events .....	5-98
149. Preparation and Surface Operation Events .....	5-98
151. Takeoff Events .....	5-98
153. Climb, En Route, and Descent Events .....	5-99
155. Approaches to Landings .....	5-100
157. Landing Events .....	5-101
159. Missed Approach Events .....	5-101
161. Normal and Abnormal Procedure Events .....	5-102
163. Emergency Procedure Events .....	5-102
165. Standards of Acceptable Performance .....	5-102
166.-170. Reserved .....	5-103

## Section 6. CONDUCT OF FLIGHT TESTS IN A HELICOPTER

171. Training Required Before Flight Test .....	5-113
173. Planning the Flight Test .....	5-113
175. Events to be Evaluated During a Helicopter Oral Test and Flight Test .....	5-113
177. Preflight Briefing .....	5-113
179. Crew Qualifications .....	5-113
181. Vision Restriction Devices .....	5-113
183. Conduct of the Flight Test .....	5-113
185. Safety .....	5-114

Flight Tests .....	5-121
197. Documentation of Successfully Completed Flight Tests .....	5-121
199. Documentation of Failed Oral Tests or Flight Tests .....	5-122
201. Incomplete Tests .....	5-122
202.-220. Reserved .....	5-123

### CHAPTER 3. FLIGHT ENGINEER CERTIFICATE AND CLASS RATINGS

#### Section 1. APPLICATION PHASE

221. Applicability .....	5-133
223. Eligibility for the FE Written Test .....	5-133
225. Eligibility for the Oral Test .....	5-134
227. Requirements to Extend the Validity Date of a Written Test .....	5-137
229. Eligibility for the Flight Test .....	5-137
231. Time Limits for the Testing Process .....	5-138
232.-238. Reserved .....	5-138

#### Section 2. ORAL AND FLIGHT TESTS

239. Oral Test Events .....	5-146
241. Oral Test Standards .....	5-146
243. Acceptable Methods of Accomplishing Flight Tests .....	5-146
245. ATA Exemption .....	5-146
247. Conduct of an FE Flight Test .....	5-147
249. Flight Test Events .....	5-148
251. Standards of Performance .....	5-149
253. Planning a Simulator Flight Test Segment .....	5-149
255. Applicant Briefing .....	5-149
257. Supporting Crewmembers .....	5-150
259. Conducting a Flight Test in a Simulator .....	5-150
261. Conducting a Flight Test in an Airplane .....	5-150



269.	Successful Applicants of Oral Tests and First Segments of	
	Two-Segment Flight Tests	5-161
271.	Successful Completion of the Entire Flight Test	5-161
273.	Documentation of Failed Oral Tests or Flight Tests	5-162
275.	Incomplete Tests	5-162
276.-284.	Reserved	5-162

## CHAPTER 4. AIRCRAFT DISPATCHER CERTIFICATES

### Section 1. GENERAL INFORMATION

285.	General	5-171
287.	Designation of District Offices and Inspectors	5-171
289.	Eligibility for Written Test	5-171
291.	Eligibility for the Practical Test	5-171
293.	Practical Test	5-172
295.	Successful Applicants	5-174
297.	Unsuccessful Applicants	5-174
299.	Supervisory Responsibility	5-175
300.-350.	Reserved	5-175

## CHAPTER 5. AIR TRANSPORTATION DESIGNATED EXAMINERS

### Section 1. GENERAL

351.	General	5-195
353.	Overview of Different Types of Examiners	5-195
355.	Guidance for Managers When Designating Examiners	5-195
357.	Designated Examiner Authority and Responsibilities	5-197
359.	Supervising Inspector Responsibilities	5-198
361.	Office Manager Responsibilities	5-199

375. Selection of Examiners .....	5-215
377. Examiner Training and Evaluation .....	5-215
379. Supervision and Administrative Control of Designated Examiners .....	5-216
381. Administrative Files .....	5-217
383. Processing Initial Examiner Designations .....	5-217
385. Designated Examiners Abroad .....	5-217
387. Multiple Examiner Designations .....	5-218
389. Amendment of Designated Examiner Designations .....	5-219
391. Renewal of Designated Examiner Designations .....	5-219
393. Processing Designated Examiner Certification Paperwork .....	5-219
395. Review of Designated Examiner Decisions .....	5-220
397. Termination of Designated Examiner Designation .....	5-220
399. Adverse Actions .....	5-221
400.-410. Reserved .....	5-222

## CHAPTER 6. AIRCREW DESIGNATED EXAMINER (ADE) PROGRAM

### Section 1. GENERAL

411. General .....	5-241
413. ADE Program Objectives .....	5-241
415. Program Description .....	5-241
417. Guidelines for Establishing an ADE Program .....	5-241
419. Operator Qualification for an ADE Program .....	5-242
420.-430. Reserved .....	5-242

### Section 2. ADE PROGRAM MANAGEMENT

431. General .....	5-255
433. Administrative Structure of an ADE Program .....	5-255
435. Responsibilities of POI's .....	5-255
437. Responsibilities of APM's .....	5-256
439. APM Qualifications .....	5-258

451. Certificate-Holding Office Manager Responsibilities .....	5-261
453. Regional Flight Standards Division (RFSD) Responsibilities .....	5-262
455. Establishing an ADE Program .....	5-263
457. Program Revisions .....	5-263
458.-468. Reserved .....	5-263

### Section 3. AIRCREW PROGRAM DESIGNEES (APD's)

469. General .....	5-289
471. Privileges and Responsibilities of APD's .....	5-289
473. Selection of APD's .....	5-289
475. APD Training and Evaluation .....	5-290
477. Supervision and Administrative Control of APD's .....	5-290
479. Certificate-Holding District Office (CHDO) APD Administrative Files .....	5-291
481. Processing Initial APD Designations .....	5-291
483. Renewal of APD Designations .....	5-291
485. Amendment of APD Designations .....	5-292
487. Processing APD Certification Paperwork .....	5-292
489. Review of APD Decision .....	5-292
491. Termination of APD Designations .....	5-292
492.-502. Reserved .....	5-293

## CHAPTER 7. AIRCRAFT NAVIGATOR CERTIFICATES

### Section 1. GENERAL

503. Applicability .....	5-305
505. Eligibility .....	5-305
507. Application Phase .....	5-305
509. Individuals Qualified to Conduct Aircraft Navigator Flight Tests .....	5-305
511. Conduct of Written Test .....	5-305
513. Conduct of Oral Test .....	5-305
515. Conduct of Flight Test .....	5-305

## CHAPTER 8. SCHOOL DESIGNATED EXAMINER (SDE) PROGRAM (TBD)\*

531.-652. Reserved .....	5-319
--------------------------	-------

## CHAPTER 9. SELECTED PRACTICES

### Section 1. RE-EXAMINATION OF AIRMEN UNDER SECTION 609

653. Background .....	5-441
655. General .....	5-441
657. Basis for a Re-examination .....	5-441
659. Inspector Authority to Prohibit the Operation of Aircraft .....	5-441
661. Notification of Other FAA Officials .....	5-442
663. Procedures for Initiating a Re-examination .....	5-442
665. Procedures for Handling Various Responses to Notification for Re-examination .....	5-443
667. Procedures for Conducting a Re-examination .....	5-444
669. Re-examination Results .....	5-445
670.-680. Reserved .....	5-446

### Section 2. AMENDMENTS TO CERTIFICATES AND REPLACEMENT OF LOST CERTIFICATES

681. General .....	5-465
683. Amendments to Certificates .....	5-465
685. Replacement of Certificates .....	5-466
686.-696. Reserved .....	5-467

### Section 3. RESERVED (TBD)\*

697.-728. Reserved .....	5-485
--------------------------	-------

\*(TBD) = TO BE DEVELOPED

## Section 5. DETECTION OF FALSIFIED OR ALTERED AIRMAN CERTIFICATES

743. General .....	5-633
745. Establishing Airman Identity .....	5-633
747. Suspected Counterfeiting .....	5-633
749. Identification of Forged or Altered Airman Documents .....	5-633
751. Duplicate Certificates .....	5-633
753. Personal Possession of Pilot Certificates .....	5-633
754.-764. Reserved .....	5-634

## Section 6. RENEWAL OF FLIGHT INSTRUCTOR CERTIFICATES

765. General .....	5-647
767. Criteria for Renewal .....	5-647
769. Inspector Qualifications .....	5-647
771. Processing Renewals .....	5-647
773. Expired Certificates .....	5-647
774.-784. Reserved .....	5-648

## Section 7. SPECIAL MEDICAL FLIGHT TESTS

785. General .....	5-661
787. Basic Guidelines for Conducting a Special Medical Test .....	5-661
789. Use of Simulators .....	5-661
791. Specific Testing Procedures .....	5-662
793. Medical Flight Test Completion, Results, and Report .....	5-663
794.-804. Reserved .....	5-664

## Section 8. U.S. AIRMAN CERTIFICATES AND SPECIAL PURPOSE AIRMAN CERTIFICATES ISSUED ON THE BASIS OF A FOREIGN AIRMAN CERTIFICATE

805. General .....	5-685
--------------------	-------

821. General .....	5-707
823. Eligibility .....	5-707
825. Application .....	5-707
827. Proof of Birth for Persons Born in the U.S. ....	5-707
829. Proof of Citizenship for Persons Born Abroad Who Acquired U.S. Citizenship Through a Parent .....	5-708
831. Proof of Citizenship for Naturalized Citizens .....	5-708
833. Completion and Disposition of File .....	5-708
835. Issuance of International Crewmember Certificate by AVN-460 .....	5-709
837. Surrender and Reissuance of International Crewmember Certificate .....	5-709
839. Replacement of Lost Certificates .....	5-709
841. Reissuance of International Crewmember Certificate for a Name Change .....	5-709
842.-852. Reserved .....	5-710

of determining if that airman is competent to maintain the privileges of the airman's existing certificate. Such re-examinations, commonly termed "609 actions," are not normally conducted unless an event occurs that calls into question the airman's competency. The event may have been an accident or an incident, or it may have occurred during a surveillance by the inspector. A 609 action is not punitive and is not intended to determine guilt or innocence; rather, it is conducted only for the purpose of resolving questions about an airman's competency. Detailed information on the enforcement aspects of re-examinations conducted under section 609 is found in FAA Order 2150.3, "Compliance and Enforcement Program."

**655. GENERAL.** This section contains direction and guidance to be used by inspectors when re-examining airmen for questions of competence noted during operations conducted under Part 121 and Part 135. Specifically, this section contains information concerning the following:

- The basis for a re-examination
- Inspector authority to prohibit operation of an aircraft
- Notification of other FAA officials
- Procedures for initiating a re-examination
- Procedures for handling various responses to a notification for a re-examination
- Procedures for conducting a re-examination
- Procedures for handling the results of a re-examination

**657. BASIS FOR A RE-EXAMINATION.** An inspector's decision to conduct a re-examination of an airman's

evidence of incompetence. The airman's failure on a required proficiency or competency check, or even repeated failures on a check, does not by itself constitute probable cause for a re-examination. For example, if during the routine surveillance of a flight check of a pilot conducted by an operator's check airman, the pilot fails to perform a particular maneuver to the standards of the pilot's airman certificate, the check airman may stop the check, instruct the pilot, and then resume the check. This may happen more than once with one pilot, and does not indicate a lack of competence. In this case, the inspector should not initiate a request for re-examination. A re-examination would be initiated, however, if during an en route inspection, the inspector notes that a pilot performs in such a way that would call into question the safe completion of that or any subsequent flight. In such a case, the inspector should follow the guidance of this section to prevent the pilot from continuing to act as a required flight crewmember until the question of the pilot's competence has been resolved.

**659. INSPECTOR AUTHORITY TO PROHIBIT THE OPERATION OF AIRCRAFT.** If the inspector observes pilot incompetence during the airborne portion of an en route inspection, the inspector's inflight options are limited. Caution must be exercised on the part of the inspector as any derogatory comment could exacerbate the situation, resulting in a greater hazard to safety. The inspector should use discretion and try to determine what action, if any, on the inspector's part, would facilitate a safe completion of the flight. When the situation allows, the inspector shall advise the pilot that the pilot's competency is in question. The inspector shall further request that the airman voluntarily refrain from further flight until the question of competence has been resolved.

A. If the airman agrees to refrain from further flight, the inspector shall follow the procedures of this section and FAA Order 2150.3 when arranging and conducting the re-examination.

B. If the airman whose competence is in question does not agree to refrain from further flight, the inspector shall, as soon as possible upon landing, contact an appropriate management official of the operator by telephone. The inspector shall inform the operator's management official of the following:

- All pertinent information to show probable cause that the pilot's competence is in question
- The steps that the inspector intends to pursue based on the information
- A request that the operator assist the FAA in its investigation and take immediate action to ensure that the pilot does not serve on any further flights pending the outcome of the re-examination
- A reminder to the official that the FAA has the authority to prohibit, when warranted in the interest of aviation safety, the operation of the aircraft in the event that the operator fails to take action on its own

**661. NOTIFICATION OF OTHER FAA OFFICIALS.** The inspector shall immediately notify his or her supervisor and the certificate management unit or office that holds the operator's certificate. This notification shall be by the most expeditious means possible, and must include the information in previous paragraph 659A, as well as the action the inspector intends to pursue. Usually, this notification is through the FAA Regional Operations Center in the field; however, in the interest of public safety, the inspector is authorized to directly contact the Washington Headquarters Operations Center at (202) 863-5100, if necessary. If the inspector does not receive a response from the operator that satisfactorily resolves the inspector's safety concerns, the inspector shall notify the management of Flight Standards according to the inspector's own chain-of-command, who in turn shall notify

having examined reliable reports involving the airman; after having obtained evidence about the airman through an accident, incident, or enforcement investigation; or, based upon personal knowledge of an occurrence in which the airman's competence is the probable cause of the occurrence. After the inspector has determined that there is a sufficient basis for conducting a re-examination of an airman under section 609 of the FA Act, the inspector shall initiate the following procedures:

A. *Notification to Airman of Re-Examination.* The inspector shall notify the airman by letter that a re-examination is necessary (see figure 5.9.1.1.). The inspector must send the letter of notification by certified mail with a return receipt. The inspector should ensure that the letter contains the following specific information for the airman:

- The specific reasons for the re-examination, such as an accident, incident, or occurrence
- The identification of the certificate or ratings for which the re-examination is to be conducted, with appropriate emphasis items
- The appropriate category, class, and type of aircraft or simulator required for the re-examination
- Who the airman is to contact in response to the notification letter
- A time limit of 10 days upon receipt of the letter for responding to the notification letter

**NOTE:** If the re-examination is a result of an occurrence involving operations conducted under Part 121 or Part 135, the inspector shall send a copy of the letter to the operator and to the operator's principal operations inspector (POI). Additionally, for those situations involving critical safety issues, the POI should be



availability. The inspector should also allow the airman enough time to prepare for the re-examination. A normal preparation period would be within 10 days after the airman's receipt of the letter of notification. The inspector may make exceptions to this general rule and should be as accommodating as is practical. The inspector may not allow the airman to postpone the re-examination indefinitely.

**665. PROCEDURES FOR HANDLING VARIOUS RESPONSES TO NOTIFICATION FOR RE-EXAMINATION.** Inspectors should be aware that several types of airman responses may result from sending notification of a re-examination. Inspectors must handle any response with tact and should coordinate closely with the POI and the Regional Counsel, whenever necessary. Some of the varied airman responses are as follows, along with appropriate direction and guidance to be used by inspectors:

*A. Airman Submits to Re-Examination.* The airman may respond positively and promptly to the letter of notification for a re-examination. In this case, an appropriately qualified inspector shall conduct the inspection at a mutually acceptable time and place. This date should be set at a reasonable and practical time for all involved.

*B. Airman Schedules Appointment at a Date Later Than the Specified Limit.* The airman may request an appointment for re-examination after the time limit contained in the letter of notification. In this case, the inspector may request that the airman temporarily deposit the airman certificate at the district office. The airman must be informed in the presence of a third person, however, that the airman is not required to deposit the airman certificate with the district office or to sign any statement. This procedure should also be used in the case of an airman convalescing from an accident or illness, or in the case of a person having the aircraft repaired that is to be used for the re-examination flight check.

appropriate limitations should be included on the certificate. For example, if instrument competency is questioned, the temporary airman certificate should not contain the instrument rating. There is never a case in which a student pilot certificate should be issued. The temporary airman certificate issued and the letter of temporary deposit (see figure 5.9.1.6.) must have the same expiration date.

(2) If the airman has not completed the re-examination at the end of the expiration date due to circumstances beyond the reasonable control of the inspector, the inspector may issue a new temporary airman certificate for an additional period not to exceed 30 days. This action may be taken provided the airman agrees to such action and submits a new letter of temporary deposit to the district office with the appropriate expiration date as described above. If, at the end of this 30-day period, the airman has either not successfully completed the re-examination test, failed to appear, or has not made other acceptable arrangements, immediate legal enforcement action shall be taken to suspend the permanent airman certificate or rating in question until the airman has demonstrated competency to hold that airman certificate. Regional Counsel shall be consulted on disposition of the airman certificate on temporary deposit before its return to the airman.

*C. Airman Voluntarily Surrenders, Downgrades, or Cancels Certificate or Rating.* The airman may volunteer to surrender the certificate or rating for cancellation. An airman's application for the voluntary surrender or downgrading of a pilot certificate or for the cancellation of a rating may be accepted by an inspector only in accordance with FAR 61.27.

(1) *Written Request.* A certificate or rating shall not be accepted for surrender or downgrading unless the applicant submits a request in writing and fully understands that the reinstatement of the certificate or rating may be accomplished only by successful completion of all required written and practical tests for that certificate or rating. The

- Must not be conditional and shall be patterned after figure 5.9.1.7.

(2) *Legal Understanding of Voluntary.* Not only must the surrender of the airman certificate be voluntary, it must also be documented as such. The inspector must clearly understand that absolutely no FAA coercion is to be used. For example, if an FAA inspector during an investigation told an airman that the airman had violated a FAR, and then the inspector accepted the airman's certificate for surrender, the action would not appear to be voluntary. In a legal enforcement case, FAA inspectors have neither the authority nor the responsibility to make such a statement of violation, as such a statement is solely a function of the Regional Counsel.

(3) *Procedures.* When an airman elects to surrender an airman certificate as stated in previous subparagraph (1), the inspector may accept the certificate, along with a letter of surrender, in lieu of a re-examination (see figure 5.9.1.8.) signed by the airman. The inspector shall forward the signed letter of surrender, the airman's permanent certificate, a copy of any temporary certificate previously issued in exchange for a permanent certificate on temporary deposit, and a completed application for the issuance of a modified certificate (FAA Form 8710-1), to the Airmen Certification Branch, AVN-460, for cancellation. The inspector shall also forward a copy of the completed file to the regional flight standards division (RFSD) for review.

D. *Airman Refuses to Submit to Re-Examination.* If the airman either fails to submit to a re-examination within the time limit stated (excluding unforeseen problems such as weather or mechanical problems), or, if the airman demonstrates an unwillingness to submit to a re-examination, the inspector shall initiate an emergency enforcement action to suspend the airman's certificate. Inspectors shall

- Documentation supporting the need for the airman's re-examination

- A copy of the original notification letter sent to the airman
- Evidence of the effort made by the inspector to obtain a voluntary re-examination of the airman

(2) *Regional Counsel Action.* When necessary in the interest of aviation safety, inspectors should request that the Regional Counsel issue an emergency order of suspension and an appropriate certificate stop order to suspend the airman's certificate or ratings until the airman submits to the re-examination.

**667. PROCEDURES FOR CONDUCTING A RE-EXAMINATION.** Inspectors shall use the following direction and guidance when conducting the re-examination of an airman:

A. *Inspector Qualification.* An inspector conducting a re-examination test must hold at least the same grade of certificate, with appropriate category, class, and type rating as the one for which the airman is being tested. For flight engineer re-examinations, the inspector must be flight engineer-qualified for the aircraft in which the airman is being tested. For re-examinations involving airmen other than flight crewmembers, the inspector shall hold a certificate at least equal to the airman's certificate in question. Designated examiners or check airmen are not authorized to administer section 609 re-examinations.

**NOTE:** For those aircraft for which the FAA does not maintain a qualified inspector, the regional division manager shall assign the best qualified inspector to accomplish the re-examination.

B. *References.* Inspectors shall conduct the re-examination of an airman according to the appropriate practical test

D. *Extent of Re-Examination.* Inspectors conducting the re-examination should refer to the airman's letter of notification to ensure that all areas specified in the airman's letter are included in the re-examination. Before the re-examination begins, the inspector shall discuss any areas of special emphasis with the airman and resolve any questions or concerns the airman may have. The airman should also be informed that the re-examination is not necessarily limited to the special emphasis items.

E. *Re-Examination of Airman's Knowledge.* The re-examination of an airman's aeronautical knowledge should be conducted using an oral or written test developed by the inspector.

F. *Use of Simulators.* If the airman's qualifications can be evaluated in a simulator, inspectors may conduct the test in a simulator.

G. *Re-Examination of an Airman Following Airspace Violations.* If the re-examination is being conducted as a result of a terminal control area (TCA) or airport radar service area (ARSA) incursion, the inspector should consider using Action Notice 8080.62, "Aviation Remedial Action Written Test Book for Airspace Violations," to determine the airman's qualification.

**669. RE-EXAMINATION RESULTS.** An airman either satisfactorily completes a re-examination or fails it. There is no other status for the completion of a re-examination. Upon completion of the re-examination, the inspector shall immediately debrief the airman concerning the re-examination results. Inspectors should use the following direction and guidance, as applicable:

A. *Airman Has Satisfactorily Completed the Re-Examination.* If the airman's re-examination was satisfactorily completed, and the airman's certificate was previously suspended pending the re-examination test results, the

results of the re-examination test, the inspector shall issue the airman a letter of results (see figure 5.9.1.3.), and the airman may then continue to exercise the privileges of the certificate and ratings. If the airman certificate was on temporary deposit, the inspector shall return it to the airman.

B. *Airman Has Not Satisfactorily Completed the Re-Examination.* The airman must be informed in detail of each deficiency. Additionally, if the airman's certificate had been temporarily deposited at the district office and the temporary deposit term is nearing expiration, a decision must be made as to whether to initiate enforcement proceedings to suspend the certificate or to extend the temporary deposit for a period of time not to exceed 30 days.

(1) If, in the opinion of the inspector, the airman could successfully complete another re-examination after obtaining additional instruction, every effort must be made to encourage the airman to do so. In this case, the guidance on voluntary temporary deposit of the airman's certificate shall be followed.

(2) If the inspector does not feel that the airman would benefit from additional instruction, the inspector shall follow the previous guidance on initiating legal enforcement action.

C. *Completion of Inspector's Report.* The inspector must complete the inspector's report section on the front side of FAA Form 8400-3, "Application for Airman Certificate and/or Rating" (see figure 5.9.1.4.) or on the reverse side of FAA Form 8710.1, "Airman Certificate and/or Rating Application" (see figure 5.9.1.5.), as applicable. The inspector shall mark either "Approved" or "Disapproved" on the application, as appropriate, to indicate the re-examination results. If appropriate, the inspector shall delete, "Temporary certificate issued" or, "Disapproval notice issued" on the form. The inspector shall attach all required documents,



Date

Airman's Name and Address

Dear \_\_\_\_:

Investigation of [the accident, incident, occurrence, or other event that led to the re-examination], that occurred on [date], gives reason to believe that your competence as an airman is in question and that a re-examination is necessary as authorized under section 609 of the Federal Aviation Act of 1958 to determine your qualification to hold a [grade of pilot certificate, flight engineer, aircraft dispatcher, etc.] certificate.

We request that you appear at, or telephone, this office no later than 10 calendar days from the receipt of this letter to schedule and accomplish the re-examination. The re-examination will consist of appropriate [grade of certificate or rating] practical test maneuvers with emphasis on [include any special emphasis items].

If you elect to take the re-examination at another Flight Standards District Office or Certificate Management Office, please advise us by completing and returning the enclosed notification form in the self-addressed envelope which is enclosed for your convenience.

If you do not accept this opportunity for re-examination by the date indicated above, it will be necessary for us to start emergency proceedings to suspend your airman certificate unless other arrangements are made. A reasonably later date may be arranged when required by circumstances beyond your control.

Inspector [Name of inspector] is available to discuss this matter with you and provide any information that might assist you.

Signed by Inspector Making Report

---

District Office Address

Dear Inspector \_\_\_\_:

I have an appointment with [name] Flight Standards District Office for re-examination at [time] on [date].

Signed by airman

---

ii. **TEMPORARY AIRMAN CERTIFICATE**

vii. AIRMAN'S SIGNATURE	THIS CERTIFIES THAT							IV.
								V.
	DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY VI.	
								IN.
	IX. has been found to be properly qualified and is hereby authorized in accordance with the conditions of issuance on the reverse of this certificate to exercise the privileges of							
	RATINGS AND LIMITATIONS							
	XII.							
	XIII.							
	THIS IS <input type="checkbox"/> AN ORIGINAL ISSUANCE <input type="checkbox"/> A REISSUANCE OF THIS GRADE OF CERTIFICATE					DATE OF SUPERSEDED AIRMAN CERTIFICATE		
	BY DIRECTION OF THE ADMINISTRATOR						EXAMINER'S DESIGNATION NO. OR INSPECTOR'S REG. NO.	
X. DATE OF ISSUANCE			X. SIGNATURE OF EXAMINER OR INSPECTOR			DATE DESIGNATION EXPIRES		
FAA Form 8080-4 (8-79) USE PREVIOUS EDITION								

Dear \_\_\_\_\_:

This letter is to inform you that a re-examination of your competence to exercise the privileges of [type of certificate or rating] conducted on [date] at [location] was satisfactory.

(If enforcement action was pending or the airman certificate was suspended pending re-examination, inform the airman the a copy of this letter is being forwarded to Regional Counsel.)

The results of this re-examination are a matter of record and will be forwarded to the Airmen Certification Branch, AVN-460, in Oklahoma City, Oklahoma.

Signed by the Inspector Conducting the Test

<input type="checkbox"/> Flight Engineer <input type="checkbox"/> Reciprocating Engine Powered <input type="checkbox"/> Turbopropeller Powered <input type="checkbox"/> Turbojet Powered			<input type="checkbox"/> Flight Navigator <input type="checkbox"/> Control Tower Operator <input type="checkbox"/> VFR Tower Rating <input type="checkbox"/> Non-Radar Approach Control Tower Rating			<input type="checkbox"/> Aircraft Dispatcher <input type="checkbox"/> Reissuance of Certificate <input type="checkbox"/> Additional Rating												
1. TYPE OF AIRCRAFT TO BE USED			2. TIME IN THIS AIRCRAFT			3. NAME OF EMPLOYER												
4. Applicant Identification						K. PERMANENT MAILING ADDRESS (Include Zip Code)												
A. NAME (First-Middle-Last)																		
B. SOCIAL SECURITY NO.		C. DATE OF BIRTH		D. HEIGHT					E. WEIGHT									
F. HAIR	G. EYES	H. SEX	I. NATIONALITY															
J. PLACE OF BIRTH																		
5. Certificates Held by Applicant <div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;">A. <input type="checkbox"/> Pilot</div> <div style="width: 33%;">B. <input type="checkbox"/> Flight Navigator</div> <div style="width: 33%;">E. <input type="checkbox"/> Ground Instructor</div> <div style="width: 33%;"> <input type="checkbox"/> Airline Transport    <input type="checkbox"/> Flight Instructor         </div> <div style="width: 33%;">C. <input type="checkbox"/> Control Tower Operator</div> <div style="width: 33%;">F. <input type="checkbox"/> Aircraft Dispatcher</div> <div style="width: 33%;"> <input type="checkbox"/> Commercial    <input type="checkbox"/> Private         </div> <div style="width: 33%;">D. <input type="checkbox"/> Flight Engineer</div> <div style="width: 33%;">G. <input type="checkbox"/> Mechanic</div> </div>																		
6. Applicant's Certification I certify that I meet all pertinent requirements of the Regulations for the certificate or rating applied for  <div style="display: flex; justify-content: space-between;"> <span>_____ Date</span> <span>_____ Applicant's Signature</span> </div>																		
7. I consider the above applicant ready to take the test for which he/she is applying: <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;">           A. <input type="checkbox"/> Oral Test            B. <input type="checkbox"/> Flight Test         </div> <div style="width: 10%; text-align: center;">or</div> <div style="width: 45%;">           C. <input type="checkbox"/> Practical Test  <i>Aircraft Dispatcher Only</i> </div> </div>																		
D. Date		Instructor's Signature			Instructor's Certificate No. And Expiration Date		Grade and Certificate No.											
E. Date		Instructor's Signature			Instructor's Certificate No. And Expiration Date		Grade and Certificate No.											
8. Evaluation Record																		
		Inspector	Examiner	Signature				Date										
Oral																		
Practical Test Aircraft Dispatcher																		
Practical Test Control Tower Operator																		
Simulator Check																		
Aircraft Flight Check																		
9. Inspector's Record																		
<input type="checkbox"/> Temporary Airman Certificate Issued <input type="checkbox"/> Notice of Disapproval of Application Issued <input type="checkbox"/> Examiner's Action Accepted																		
DATE		INSPECTOR'S SIGNATURE						FAA OFFICE										
CP	REG	OFFICE	COM	ISS	ACT	EMP	TRNG	M/T	DIS	CLASS	SEX	RATING	STATE	COUNTRY	<input type="checkbox"/> Do Not Micro <input type="checkbox"/> Special Mailing <input type="checkbox"/> Airmail		<input type="checkbox"/> IFO Mailing <input type="checkbox"/> Correspondence	



Date	Instructor's Signature	Certificate No.	Certificate Expires
<b>Air Agency's Recommendation</b>			
The applicant has successfully completed our _____ course, and is recommended for certification or rating without further _____ test.			
Date	Agency Name and Number	Official's Signature	
		Title	
<b>Designated Examiner's Report</b>			
<input type="checkbox"/> Student Pilot Certificate Issued ( <i>Copy attached</i> ) <input type="checkbox"/> I have personally reviewed this applicant's pilot logbook, and certify that the individual meets the pertinent requirements of FAR 61 for the pilot certificate or rating sought. <input type="checkbox"/> I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate. <input type="checkbox"/> I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below. <div style="margin-left: 40px;"> <input type="checkbox"/> Approved—Temporary Certificate Issued (<i>Copy Attached</i>)  <input type="checkbox"/> Disapproved—Disapproval Notice Issued (<i>Copy Attached</i>)         </div>			
Location of Test (Facility, City, State)		Duration of Test	
		Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)
Date	Examiner's Signature	Certificate No.	Designation No.      Designation Expires
<b>Evaluator's Record For Airline Transport Certificate/Rating Only</b>			
	Inspector	Examiner	Signature      Date
Oral	<input type="checkbox"/>	<input type="checkbox"/>	_____
Simulator Check	<input type="checkbox"/>	<input type="checkbox"/>	_____
Aircraft Flight Check	<input type="checkbox"/>	<input type="checkbox"/>	_____
<b>Inspector's Report</b>			
I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below. <input type="checkbox"/> <b>Approved</b> —Temporary Certificate Issued <input type="checkbox"/> <b>Disapproved</b> —Disapproval Notice Issued			
Location of Test (Facility, City, State)		Duration of Test	
		Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Student Pilot Certificate issued  <input type="checkbox"/> Examiner's Recommendation  <div style="margin-left: 20px;"><input type="checkbox"/> ACCEPTED   <input type="checkbox"/> REJECTED</div> <input type="checkbox"/> Examiner Recommends Retesting  <input type="checkbox"/> Reissue or Exchange of Pilot Certificate  <input type="checkbox"/> Special medical test conducted—report forwarded to Aeromedical Certification Branch, AAM-130         </div> <div style="width: 30%;"> <input type="checkbox"/> Certificate or Rating Based on  <input type="checkbox"/> Military Competence  <input type="checkbox"/> Foreign License  <input type="checkbox"/> Approved Course Graduate  <input type="checkbox"/> Issued  <input type="checkbox"/> Denied         </div> <div style="width: 30%;"> <input type="checkbox"/> Instructor   <input type="checkbox"/> Flight   <input type="checkbox"/> Ground  <input type="checkbox"/> Renewal      <input type="checkbox"/> Approved  <input type="checkbox"/> Reinstatement   <input type="checkbox"/> Disapproved  <b>Instructor Renewal Based on</b>  <input type="checkbox"/> Activity      <input type="checkbox"/> Training Course  <input type="checkbox"/> Acquaintance   <input type="checkbox"/> Test         </div> </div>			
Training Course (FIRC) Name		Graduation Certificate No.	Date
Date	Inspector's Signature	FAA District Office	
<b>Attachments:</b>			
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <input type="checkbox"/> Student Pilot Certificate (copy)  <input type="checkbox"/> Report of Written Examination  <input type="checkbox"/> Temporary Pilot Certificate (copy)         </div> <div style="width: 35%;"> <input type="checkbox"/> Airmans Identification (ID)  <div style="margin-left: 20px;">Form of ID _____</div> <div style="margin-left: 20px;">Number _____</div> <div style="margin-left: 20px;">Expiration Date _____</div> </div> <div style="width: 5%;"> <input type="checkbox"/> Notice of Disapproval  <input type="checkbox"/> Superseded Pilot Certificate  <input type="checkbox"/> Answer Sheet Graded  <input type="checkbox"/> Answer Sheet Graded (Foreign Instrument)         </div> </div>			

(pilot, flight engineer, aircraft dispatcher, etc) certificate number \_\_\_\_\_ for temporary deposit in the (name of  
FSDO or CMO) of the Federal Aviation Administration until (expiration date).

I understand that, if by that date, I have not demonstrated the airman competence required to hold that certificate or rating, or I have received an extension of time within which to complete the re-examination, legal enforcement action will be taken to suspend the privileges of my certificate or rating until I demonstrate the competence prescribed in the Federal Aviation Regulations for its original issuance.

Signature

\_\_\_\_\_

Printed Name

\_\_\_\_\_

Address

\_\_\_\_\_

number 123456 for whatever action the Federal Aviation Administration may deem necessary. My rights to be heard as to why my certificate should not be amended, suspended, or revoked have been fully explained to me and are hereby waived.

Signature

---

Printed Name

---

Address

---

I understand that this constitutes unequivocal abandonment of the certificate and that another FAA certificate or rating may be reissued to me only upon successful completion of all written and practical tests prescribed for its issue by the Federal Aviation Regulations.

Signature

---

Printed Name

---

Address

---

---

[PAGES 5-455 THROUGH 5-464 RESERVED]

telephone licenses), and when replacing lost certificates.

460 of the ACB.

**683. AMENDMENTS TO CERTIFICATES.** An amendment to an airman's certificate is necessary whenever a change in name, address, nationality, sex, date of birth, and other changes occur. When amending airman certificates for these reasons, inspectors should use the following guidance:

A. *Change of Name.* Inspectors should have airmen apply for a name change on a certificate by first submitting FAA Form 8710-1, "Airman Certificate and/or Rating Application" (see figure 5.9.2.5.). The inspector should request that the applicant attach the applicant's current certificate and a photocopy of the marriage license, court order, or other document which substantiates the validity of the requested change to FAA Form 8710-1. The inspector should examine and verify the documents to the best of the inspector's ability, and then issue a temporary certificate. The inspector must fill out the "Inspector's Report" section of the application and include the application, the superseded certificate, a copy of the temporary certificate, and all other supporting documents and send them to AVN-460 of the Airmen Certification Branch (ACB).

**NOTE: The ACB requests that photocopies be sent instead of the original documents.**

B. *Re-issuance of International Crewmember Certificates in a New Name.* For the re-issuance of an international crewmember certificate in a new, or married name, the inspector should have the airman complete a new FAA Form 8060-6, "Crewmember Certificate Application," and indicate the new name, change of address (if applicable), certificate number, and an explanation about the application being reissued because of the airman's new name. The inspector must attach the crewmember's current crewmember certificate to the application, as well as a

C. *Change of Address.* FAR 61.30, 63.21, and 65.21 all require the appropriate certificate holder to notify the ACB within 30 days of a change of the airman's permanent mailing address. This notification (see figure 5.9.2.4.) must be in writing to the Department of Transportation, Federal Aviation Administration, AVN-460, P. O. Box 25082, Oklahoma City, Oklahoma 73125-4940. Additionally, Form AC 8060-56 (see figure 5.9.2.3.) may be used. AVN-460 will not issue a new certificate based solely on the change of address.

**NOTE: The address shown on an airman's application for a medical certificate is not routinely transmitted to the ACB. Therefore, the procedure for renewal of a medical certificate does not comply with change-of-address notification unless the applicant requests it in writing at the time of application.**

D. *Change of Nationality.* In order to change the record of nationality, the airman may provide a photocopy of INS Form G641, "Application for Verification of Information." If an INS Form G641 is not available, the FAA inspector, or paratechnical, must review the naturalization document. When examining the naturalization document, the inspector should verify that the document has the petition number, the date of change, and the name and location of the court of issuance. The inspector may never accept verbal information to substantiate any of the required information. For any case that concerns a change of nationality, the inspector may not issue a temporary certificate; instead, the inspector shall forward a copy of FAA Form 8710-1, "Airman Certificate and/or Rating Application," the current certificate, and the documentation to AVN-460 of the ACB.

**NOTE: The inspector may determine the current fee for replacement of a certificate by telephoning the ACB in Oklahoma City at (405) 680-3261 or FTS 747-3261.**

a replacement certificate; therefore, the inspector should tell the airman to obtain a collect telegram verification that the certificate is valid and has been issued or that a temporary replacement certificate may be obtained from an FAA aviation safety inspector (ASI) in the field. The airman is required to have the telegram or temporary certificate in the airman's possession while exercising the privileges of the certificate, until the permanent replacement certificate is received.

A. *Permanent Replacement Procedures.* To obtain a permanent replacement certificate, an airman must apply for it in writing to either AVN-460 of the ACB, or the Aeromedical Certification Division (AAM-300), as stated in FAR 61.29 and FAR 63.16. The written request must contain all required information, the airman's signature, and the required fee. Application may be submitted either by form letter (see figures 5.9.2.1. and 5.9.2.2.), or by AC Form 8060-56, "Application for Replacement of Lost or Destroyed Airman Certificate(s) and Written Test Results," (see figure 5.9.2.3.), or by a standard letter containing all applicable information. If both airman and medical certificates have been lost, the airman may send a request for both types of certificates to AVN-460. In this case, AVN-460 shall coordinate with AAM-300. These offices recommend that airmen send separate requests to each branch.

B. *Obtaining a Temporary Certificate by Telegram for Immediate Use.* An airman may use a telegram issued by AVN-460 as a temporary airman certificate and/or medical certificate. An airman must have an immediate, professional need for the telegram, such as a return flight to domicile, continuation of an extended flight schedule, or continuation with any near-term aviation employment. A concurrent request for both airman and medical telegram confirmations may be directed to AVN-460 of the ACB, at (405) 680-3261. This service is available 24 hours a day, 7 days a week. In order to send a collect telegram, AVN-460 must have a verified, working telex number, the name

(2) The inspector should advise the airman to contact Western Union and verify that the particular location selected can receive a wire.

C. *Field Issuance of Temporary Certificates.* When an airman needs to obtain an immediate, temporary certificate, the preferred procedure is to request a telegram verification. A temporary airman certificate may also be issued, however, by a FSDO or by an FAA ASI in the field. In such cases, inspectors must use caution and must positively confirm an airman's status and identity. When an emergency issuance is necessary, it should be accomplished in the following manner:

(1) The airman must show that an immediate replacement of the lost certificate is necessary for either return flight(s) to domicile, continuation of an extended flight schedule, or to continue aviation employment.

(2) The airman must be unable to obtain a telegram in a reasonably efficient manner.

(3) The airman must be personally known to the inspector or present acceptable evidence of identity. Positive identification must include a photograph of the applicant, the applicant's signature, and the applicant's actual residential address if it is different from the applicant's mailing address. Acceptable methods of identification include, but are not limited to, a driver's license, government identification card, and passport. The airman's physical description must match the physical description in the records at AVN-460 of the ACB.

(4) The inspector must confirm the validity, grade, and ratings of the lost certificate by contacting AVN-460 of the ACB at (405) 680-3261 or FTS 747-3261, and AAM-300, if necessary.

(5) The temporary certificate should be clearly marked, "EMERGENCY FIELD ISSUANCE." The

certificates should apply by letter to AVN-460 of the ACB, stating the circumstances surrounding the loss of the original and including two recent photographs similar to

Federal Communications Commission, 1919 M Street, N.W., Washington, D.C. 20554.

**686. - 696. RESERVED.**

PLEASE PRINT

Telephone (405) 680-3261, FTS: 747-3261

A. This is a request for:

- \_\_\_\_\_ Airman certificate, permanent replacement  
\_\_\_\_\_ Telegraphic certificate confirmation/temporary replacement

B. Full name of person to whom the certificate was issued: \_\_\_\_\_

C. Permanent mailing address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

D. Temporary mailing address (for immediate mailing purposes if different than above): \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

E. Date and place of birth: \_\_\_\_\_

F. Physical description: sex\_\_\_\_ height\_\_\_\_ weight\_\_\_\_ hair\_\_\_\_ eye color\_\_\_\_

G. Social security number\_\_\_\_-\_\_\_\_-\_\_\_\_.

H. Nationality\_\_\_\_\_.

I. State any available information regarding the grade, number, and date of issue of the certificate, and the ratings on it. \_\_\_\_\_  
\_\_\_\_\_

J. Statement of reasons and circumstances for certificate replacement request. For company telegrams only:

Telex Number\_\_\_\_\_ City\_\_\_\_\_ State\_\_\_\_\_  
Point of contact\_\_\_\_\_ Phone number( )\_\_\_\_\_



Point of contact \_\_\_\_\_

Phone number ( ) \_\_\_\_\_

The FAA will send **collect** telegrams only.

Signature \_\_\_\_\_

Date \_\_\_\_\_

AAC-25  
P.O. Box 25082, Cashier  
Oklahoma City, OK 73169

6500 S. MacArthur Blvd,  
CAMI, Rm B-59  
ATTN: Duplicate Desk  
Oklahoma City, OK 73169

PLEASE PRINT

Full name of person to whom the certificate was issued: \_\_\_\_\_

Permanent mailing address: \_\_\_\_\_  
\_\_\_\_\_

Temporary mailing address (for immediate mailing purposes if different than above): \_\_\_\_\_  
\_\_\_\_\_

Birth date: \_\_\_\_\_ Social Security Number: \_\_\_\_-\_\_\_\_-\_\_\_\_

Class of Certificate: lost, stolen or destroyed: \_\_\_\_\_

Approximate date of issuance: \_\_\_\_\_

Statement of the reason and circumstances requesting replacement. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

For telegrams: Telex Number \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_

Point of contact \_\_\_\_\_

Phone number ( ) \_\_\_\_\_

The FAA will send collect telegrams only.

(Medical Waivers are considered separate certificates).

Signature \_\_\_\_\_

Date \_\_\_\_\_

## AIRMAN CERTIFICATE(S) AND WRITTEN TEST RESULTS

**PRIVACY ACT:** This information is required under the authority of the Federal Aviation Act (Section 602). Certification cannot be completed unless the data is complete. Disclosure of your Social Security Number (SSN) is optional. Routine uses of records maintained in the system include categories of users and the purposes of such uses; i.e., to determine that airman are certified in accordance with the provision of the Federal Aviation Act of 1958; repository of documents used by individuals and potential employers to determine validity of airman qualifications; to support investigative efforts of investigation and law enforcement agencies of Federal, State, and local governments; supportive information in court cases concerning individual status and/or qualifications in law suits; to provide data for the Comprehensive Airman Information System (CAIS); and to provide documents for microfilm and microfiche backup records.

☐ **Medical Certificate**

**Date(s) of Issuance**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**Written Test Results**

Date of Written Test

\_\_\_\_\_

**Complete name in which certificate was issued:**

(last)

**Permanent mailing address to include zip code:**

**Date and place of birth:**

(Place)

Physical Description: \_\_\_\_\_ Height (In.) \_\_\_\_\_ Weight (Lbs.) \_\_\_\_\_ Hair \_\_\_\_\_ Eyes \_\_\_\_\_ Sex \_\_\_\_\_

**Social Security Number:** \_\_\_\_\_ **Nationality:** \_\_\_\_\_

I enclose ☐ check ☐ money order in the amount of \$ \_\_\_\_\_

**Signature**

*The fee for each duplicate Airman or Medical Certificate is \$2. The fee for each written test result is \$1. Check or money order for total fees (payable to the Treasurer of the United States) must accompany request.*

***For Airman Certificate or written test result,  
mail this request to:***

**Federal Aviation Administration  
Airmen Certification Branch, AVN-460  
Post Office Box 25082  
Oklahoma City, OK 73125-4940**

***For Medical or combined Student/Medical,  
mail this request to:***

**Federal Aviation Administration  
Cashier, AVN-455  
Post Office Box 25082  
Oklahoma City, OK 73125-4939**

***Request for duplicate radio/telephone license  
should be directed to:***

Federal Communication Commission  
1919 "M" Street, NW.  
Washington, DC 20554

CHANGE OF ADDRESS NOTIFICATION  
(AIRMAN CERTIFICATE HOLDER)  
PRINT OR TYPE

Last Name		First Name, Middle Initial		DATE OF BIRTH		
				Mo.	Day	Yr.
No. and Street, Apt., Suite, P.O. Box or R D. No.				Certificate Number(s)		
City		State		Zip Code		
SIGNATURE (DO NOT Print or type)				Date		

*Federal Aviation Regulations require you to report any change in permanent mailing address. This information is mandatory for updating your airman record. Incomplete submission could result in denial of certificate privileges. If acknowledgment is requested, affix postage, self-address and seal.*

AC Form 8060-55 (9-78) (0052-00-550-8002)

☆ U.S. GPO: 1992-668-287

FAA Form 8710-1 (6-89) Supersedes Previous Edition

The applicant has successfully completed our _____ course, and is recommended for certification or rating without further _____ test.				
Date	Agency Name and Number	Official's Signature		
		Title		
<b>Designated Examiner's Report</b>				
<input type="checkbox"/> Student Pilot Certificate Issued ( <i>Copy attached</i> ) <input type="checkbox"/> I have personally reviewed this applicant's pilot logbook, and certify that the individual meets the pertinent requirements of FAR 61 for the pilot certificate or rating sought. <input type="checkbox"/> I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate. <input type="checkbox"/> I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.				
<input type="checkbox"/> Approved—Temporary Certificate Issued ( <i>Copy Attached</i> ) <input type="checkbox"/> Disapproved—Disapproval Notice Issued ( <i>Copy Attached</i> )				
Location of Test ( <i>Facility, City, State</i> )			Duration of Test	
			Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
Date	Examiner's Signature	Certificate No.	Designation No.	Designation Expires
<b>Evaluator's Record For Airline Transport Certificate/Rating Only</b>				
	Inspector	Examiner	Signature	Date
Oral	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Simulator Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
Aircraft Flight Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	_____
<b>Inspector's Report</b>				
I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.				
<input type="checkbox"/> <b>Approved</b> —Temporary Certificate Issued <input type="checkbox"/> <b>Disapproved</b> —Disapproval Notice Issued				
Location of Test ( <i>Facility, City, State</i> )			Duration of Test	
			Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Student Pilot Certificate issued  <input type="checkbox"/> Examiner's Recommendation  <input type="checkbox"/> ACCEPTED   <input type="checkbox"/> REJECTED  <input type="checkbox"/> Examiner Recommends Retesting  <input type="checkbox"/> Reissue or Exchange of Pilot Certificate  <input type="checkbox"/> Special medical test conducted—report forwarded to Aeromedical Certification Branch, AAM-130             </div> <div style="width: 30%;"> <input type="checkbox"/> Certificate or Rating Based on  <input type="checkbox"/> Military Competence  <input type="checkbox"/> Foreign License  <input type="checkbox"/> Approved Course Graduate  <input type="checkbox"/> Issued  <input type="checkbox"/> Denied             </div> <div style="width: 30%;"> <input type="checkbox"/> Instructor   <input type="checkbox"/> Flight   <input type="checkbox"/> Ground  <input type="checkbox"/> Renewal   <input type="checkbox"/> Approved  <input type="checkbox"/> Reinstatement   <input type="checkbox"/> Disapproved  <b>Instructor Renewal Based on</b>  <input type="checkbox"/> Activity   <input type="checkbox"/> Training Course  <input type="checkbox"/> Acquaintance   <input type="checkbox"/> Test             </div> </div>				
Training Course (FIRC) Name		Graduation Certificate No.	Date	
Date	Inspector's Signature	FAA District Office		
<b>Attachments:</b>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Student Pilot Certificate (copy)  <input type="checkbox"/> Report of Written Examination  <input type="checkbox"/> Temporary Pilot Certificate (copy)             </div> <div style="width: 30%;"> <input type="checkbox"/> Airmans Identification (ID)                  Form of ID _____                  Number _____                  Expiration Date _____             </div> <div style="width: 30%;"> <input type="checkbox"/> Notice of Disapproval  <input type="checkbox"/> Superseded Pilot Certificate  <input type="checkbox"/> Answer Sheet Graded  <input type="checkbox"/> Answer Sheet Graded (Foreign Instrument)             </div> </div>				

U.S. GPO: 1991-568-185

CHANGE OF NATIONALITY. Verbal information is NOT sufficient and the inspector does NOT issue a Temporary Certificate.

\_\_\_ Photocopy of form G641, "Application for Verification of Information", or other naturalization document indicating:

Petition number \_\_\_\_\_

Date of change \_\_\_\_\_

Name of court \_\_\_\_\_

Location of court \_\_\_\_\_

INTERNATIONAL CREWMEMBER CERTIFICATE.

- \_\_\_ FAA Form 8060-6 "Crewmember Certificate Application"
- \_\_\_ Crewmember's present "International Crewmember Certificate"
- \_\_\_ Marriage Certificate or other documentation
- \_\_\_ Two photographs

---

[PAGES 5-476 THROUGH 5-484 RESERVED]





[PAGES 5-486 THROUGH 5-620 RESERVED]

Par. 697-728

5-485



**729. GENERAL.** Aeronautical training and experience that is used by airmen to meet the requirements for a certificate or rating, or for recent flight experience, must be documented in a reliable record. This section provides guidance to operations inspectors on the requirement for airmen possession of logbook records and replacement of pilot flight experience records. A pilot logbook is the primary evidence of pilot experience; however, inspectors may accept operator records in lieu of a personal pilot logbook. Pilot logbooks or those company records used to meet the recordkeeping requirements of FAR 61.51 may be inspected upon reasonable request by the FAA Administrator, an authorized representative of the National Transportation Safety Board (NTSB), or any state or local law enforcement officer.

**731. LOST LOGBOOKS OR FLIGHT RECORDS.** Inspectors should advise airmen that they may reconstruct lost logbooks or flight records by providing a signed statement of previous flight time.

*A. Proof of Experience.* Airmen may use the following items to substantiate flight time and experience:

- Copies of airman medical files
- Copies of FAA Form 8710-1, "Airman Certificate and/or Rating Application"

*B. Obtaining File Copies.* Airmen who have lost their logbooks or flight records may request copies of their files from the FAA by writing to the following:

FAA Airmen Certification Branch, AVN-460  
P. O. Box 25082  
Oklahoma City, OK 73125

FAA, Aeromedical Certification Branch  
P. O. Box 25082  
Oklahoma City, OK 73125

**NOTE:** Inspectors should encourage pilots to complete the flight time sections of official record forms, even though it would not be required for that specific certificate. These records document a chronological development of flight time in case personal records become lost.

**732. - 742. RESERVED.**

**[PAGES 5-622 THROUGH 5-632 RESERVED]**



fraudulent or altered certificates and identification. Occasionally, law enforcement officers or drug enforcement agents ask FAA personnel for assistance in identifying counterfeit or forged certificates.

**745. ESTABLISHING AIRMAN IDENTITY.** The FAA Drug Enforcement Assistance Act of 1988 contained the identification of certain deficiencies in the process of issuing airman certificates. The FAA has taken steps to correct these deficiencies by establishing new procedures to be followed which reduce the possibility that pilot certificates will be issued erroneously because of fraud by the applicant or by someone claiming to be the applicant. Inspectors and others involved in airman certification shall verify the actual identity of a person applying for an airman certificate by using the following procedures:

*A. Picture Identification.* All applicants must present positive identification at the time of application. Such identification must include a recognizable photograph of the applicant, the applicant's signature, and the applicant's residential address. This information may be presented in more than one form of identification. Common sources of identification include a state driver's license, passports, government identification cards, and military or employer identification cards.

*B. Use of a Post Office Box.* Inspectors shall *not* accept a post office box address unless the applicant lives on a rural route, a boat, or in some other manner that requires the use of a P.O. box for an address. If this is the case, the applicant must include this information on a separate piece of paper with a diagram or written description of directions to the applicant's residence. When FAA Form 8710-1, "Airman Certificate and/or Rating Application" has been revised to include provisions for this information, a separate piece of paper will no longer be necessary.

*C. Other Forms of Acceptable Identification.* If an applicant does not have an acceptable form of identifica-

tion, the inspector should never attempt to confiscate a suspected forged, fraudulent, or counterfeit certificate. Since fraudulent certificates are sometimes used for criminal activities, the person in possession of this certificate may be armed and dangerous. If an inspector suspects that an airman certificate is counterfeit or forged, the inspector should immediately contact the Investigations and Security Branch of the Regional Civil Aviation Security Division or a local law enforcement officer.

**749. IDENTIFICATION OF FORGED OR ALTERED AIRMAN DOCUMENTS.** There are several methods and techniques that the inspector may use to identify counterfeit certificates. Detailed guidance may be obtained from the Airmen and Aircraft Registry Division of the Airman Certification Branch (ACB), AVN-463A.

**751. DUPLICATE CERTIFICATES.** With the exception of restricted and special-use pilot certificates, an airman is only allowed to hold one U.S. airman certificate of a kind. For example, an airman could hold a pilot, flight instructor, dispatcher, or flight engineer certificate. Duplicate certificates are issued by AVN-460 of the ACB under certain conditions and at the request of the airman. Temporary certificates, issued to an airman by inspectors or designated airman examiners upon successful completion of a practical test, are not duplicate certificates. It is possible for an airman to be issued more than one certificate through a rapid upgrade program. Airmen should be advised of their responsibility to return the superseded certificate to the FAA.

**753. PERSONAL POSSESSION OF PILOT CERTIFICATES.** FAR 61.3 requires that pilots of U.S. civil aircraft have a current pilot certificate in their personal possession when acting as a required pilot flight crewmember. This means that, to avoid the possibility of fraudulent use of another's pilot certificate, the pilot must be in possession of an original certificate, not a copy. The copy of a temporary certificate issued to an airman by the FAA or by a desig-



are regularly involved in evaluating airmen operating under these parts. This section applies only to the renewal of current flight instructor certificates and is not applicable to the reinstatement of expired certificates or the addition of new ratings to a flight instructor certificate. Details on conducting these tests can be found in volume 2, chapter 11 of FAA Order 8700.1, General Aviation Operations Inspector's Handbook.

**NOTE:** The inspector should first ask the applicant to state the basis on which the renewal application is made. The applicant's answer should indicate the level of the applicant's familiarity with the FAR's (particularly FAR 61.197) and guide the inspector to the appropriate reference.

**767. CRITERIA FOR RENEWAL.** According to FAR 61.197(b) and the guidance contained in volume 2, chapter 11 of FAA Order 8700.1, there are criteria that should be used to renew a flight instructor certificate. These criteria include a satisfactory record as a PIC of an aircraft operated under Part 121, or as a company check pilot under Part 121 or Part 135, or other activity involving the regular evaluation of pilots.

**A. Record as PIC under Part 121.** An inspector may renew the flight instructor certificate of a pilot based on his satisfactory record as PIC of an aircraft operated under Part 121, provided the pilot passes any oral test that may be deemed necessary to determine that the applicant has knowledge of current pilot training and certification requirements and standards.

**B. Company Flight Instructor or Check Pilot.** An inspector may renew a flight instructor certificate if the applicant is assigned duties as a flight instructor or check pilot with an air carrier operating under either Part 121 or Part 135. In some cases, it may be deemed necessary that these applicants demonstrate knowledge of current pilot

training and certification requirements and standards by passing an oral test administered by the inspector.

**769. INSPECTOR QUALIFICATIONS.** Generally, flight instructor renewals should be administered by an inspector who has completed general aviation indoctrination. Air carrier inspectors may, however, renew a flight instructor certificate provided the inspector holds a current flight instructor certificate and follows the guidance in this section and the guidance in volume 2, chapter 11 of FAA Order 8700.1.

**771. PROCESSING RENEWALS.** Inspectors should complete the following procedures when processing renewals for flight instructor certificates:

- Review the completed application
- Obtain the applicant's proof of employment and position
- Review applicant's record and determine if an oral examination is necessary to determine current knowledge
- Limit the oral examination, if one is necessary, to the applicant's knowledge of the following general areas: recordkeeping, National Airspace System, endorsements, certification requirements, practical test standards, and training requirements

**NOTE:** Inspector renewals should be based on acquaintance when following the preceding criteria.

**773. EXPIRED CERTIFICATES.** The procedures described in this section shall not be used to reinstate an





or evaluation that leads to the issuance of a waiver for one or more requirements for a medical certificate. FAR 67.19 authorizes applicants to apply for waivers to FAA medical standards based on a demonstration of ability.

A. *Inspector Authorization.* Inspectors may be authorized to conduct special medical flight tests by the Office of Aviation Medicine or the manager of AAM-300.

B. *Conduct of Test.* Special medical flight tests may be conducted in conjunction with a Part 121 proficiency check or a Part 135 competency check, or the test may be conducted separately. Special medical flight tests may be conducted in an aircraft or simulator, as appropriate.

C. *Operating Limitations.* Operating limitations that are placed on an airman's certificate may restrict the airman to certain aircraft types, special equipment or control arrangements, or special operating conditions.

**787. BASIC GUIDELINES FOR CONDUCTING A SPECIAL MEDICAL TEST.** Inspectors should use the following general direction and guidance when conducting a typical special medical flight test.

**NOTE:** Special medical flight testing is conducted to enable representatives of the FAA Administrator to determine the applicant's ability to perform under adverse as well as normal conditions of flight. The applicant shall be tested in accordance with the instructions provided by AAM-300 and the appropriate practical test standard. The flight test report should contain a statement about the condition of flight for which the test will be conducted.

A. *Initiation of Special Medical Flight Test.* The requirement to conduct a special medical test may occur in two ways. The FAA may initiate the requirement for such a test upon finding irregularities during an airman's physical examination, or an airman may request the special

"Statement of Demonstrated Ability" waiver to the flight standards district office (FSDO) along with a test outline sheet that contains the type of medical flight test to be given. The Office of Aviation Medicine may provide the inspector with the FAA Form 8500-9, "Medical Certificate" (see figure 5.9.7.4.) to be issued upon successful completion of the flight test. The Office of Aviation Medicine may need to also provide the inspector with a separate FAA Form 8500-9, "Medical Certificate" for the applicant to have on the applicant's person while taking the flight test.

B. *Documentation.* Before conducting a special medical flight test, the inspector must request that the airman present the following documents:

- A copy of the applicant's LOA for the test (see figure 5.9.7.1.)
- FAA Form 8710-1, "Airman Certificate and/or Rating Application" (see figure 5.9.7.2.)
- An outline of the special test to be given
- A copy of FAA Form 8500-15, "Statement of Demonstrated Ability," when appropriate (see figure 5.9.7.3.)

C. *Test Items.* During the special medical flight test, the inspector shall observe and evaluate all medical flight test items listed on the applicant's LOA.

D. *Flight Surgeon Consultation.* In the case of an airman with physical deficiencies, before the inspector can issue an airman certificate that contains less than the usual operating limitations, the inspector must consult with the regional flight surgeon.

**789. USE OF SIMULATORS.** For medical testing of professional airmen who are employed by an air carrier, the inspector may conduct the special medical flight test in a

appropriate pilot functions for the type of medical test conducted. Appropriate testing procedures for the subsequent specific medical problems shall be conducted as follows:

A. *Hearing Deficiency.* The inspector shall evaluate the applicant's ability to hear radio, voice, and signal (such as bells, chimes, buzzers, horns, clackers) communications. The applicant must be able to understand normal voice communications and adequately perform crew coordination while operating the aircraft on the ground and in the air.

B. *Deformity or Absence of the Extremities.* The inspector must determine that the applicant with a deformity or absence of any extremities can demonstrate the following abilities:

- The ability to reach and operate effectively all controls which would normally require the use of that extremity (or those extremities); the inspector should evaluate any unusual body position the applicant may use to compensate for the defect; for example, the inspector may determine what effect that position has on the applicant's field of vision
- The ability to satisfactorily perform emergency procedures relative to flight and ground operations, such as recovery from stalls, engine-out procedures in multiengine aircraft, and emergency braking
- If the pilot has an arm prosthesis and is tested in turboprops or turbojets, the ability to lift the power handles for reversing (including asymmetrical reversing)

C. *Visual Field Defect.* For visual field defects such as an eye that is missing, blind, or not correctable to stan-

- The ability to recognize other aircraft approaching on a collision course, particularly aircraft approaching from the far right or far left
- The ability to land the aircraft
- The ability to read aeronautical charts and tune the radio to a predetermined station accurately and efficiently while in flight
- The ability to read all instruments quickly and correctly

D. *Speech Defect.* For a speech defect that may consist of either a stutter or a recovery from muteness, the inspector must determine whether the applicant can demonstrate the ability to converse and be clearly understood in person and over the radio.

E. *Defective Color Vision.* When the applicant has a defect in color vision, the inspector must ensure that the applicant demonstrates the following abilities:

(1) All applicants must demonstrate the ability to read aeronautical charts for print that appears in various sizes, colors, and typefaces; for conventional markings in several colors; and for discrimination of terrain colors at a distance of 16 inches for both day and night conditions.

(2) All applicants must demonstrate the ability to read aviation instruments, particularly those with colored limitation marks and colored instrument panel lights, especially marker beacon lights and warning lights.

(3) All applicants must demonstrate the ability to recognize terrain and obstructions. When appropriate to the aircraft being used, the applicant must be able to select several emergency landing fields, preferably having marginal conditions, and describe their surfaces, such as sod, stubble,

comprehensive than the tests for second- and third-class medical certificates. In addition to the above exercises, the applicants for a first-class medical certificate must demonstrate the ability to see the following objects:

- Colored lights of other aircraft in the vicinity
- Runway approach lights
- Airport boundary lights
- Taxiway lights
- Red warning lights on such areas as TV towers, high buildings, or stacks
- Conventional signal lights from the control tower
- All color signal lights normally used in air traffic control (ATC)

(5) AAM-300 usually requires that applicants who have defective color vision take the signal light test (SLT) to obtain second- and third-class medical certificates. If possible, the test should be given at twilight to test the applicant under both daylight and night conditions. Under such special arrangements, the night-time portion of the test may include tests other than those described, such as identification of aircraft, runway, threshold, and taxiway lights. Applicants who are able to identify colors at night may have the night-time restriction removed. This test may be accomplished at the FSDO, if the FSDO is able to provide both an aviation signal light (hand-gun type) and an employee to work as a light operator. Alternatively, the applicant may use the nearest ATC tower which has a tower signal light or hand-gun signal light. The signal light operator should be asked to shine the light steadily for a period of 5 seconds for each color, green, red, and white, as randomly directed by the inspector. When conducting

repeat the procedure after 3-minute intervals until all three colors are shown.

(b) Subsequently, the inspector should accompany the applicant to an area approximately 1,500 feet from the light operator, and repeat the procedure outlined in previous subparagraph (a), while ensuring that all three colors have been displayed before completing the test.

(c) The inspector shall not indicate the accuracy of the readings during the test. If the applicant does not call each color correctly within the time period that the light is shown, the applicant fails; the test, however, is continued until completion. The inspector may find that the SLT job aid is useful (see figure 5.9.7.5.).

**793. MEDICAL FLIGHT TEST COMPLETION, RESULTS, AND REPORT.** With the exception of an SLT, if the inspector determines that the applicant has failed the special medical flight test, the inspector should terminate the test before it is completed. The SLT must be completed even if the inspector determines during the test that the applicant has failed. After the test, the inspector shall return the FAA Form 8500-15, "Statement of Demonstrated Ability," the superseded medical certificate (if applicable), the LOA, and the medical flight test report to the issuing medical office.

A. *FAA Form 8500-13, "Special Medical Flight Test Report."* The inspector must report the results of all special medical flight tests (see figure 5.9.7.6.) to the medical office that authorized the test. The following items should be included under the "Description" block in FAA Form 8500-13:

- Applicant's defect, test narration, and the inspector's recommendations
- Type of test given and any appropriate, alternative procedures determined by the inspector

- The inspector's general recommendations as well as any recommendations concerning operating limitations, or a statement that operating limitations are not required

B. *FAA Form 8500-9, "Medical Certificate."* For the purpose of a medical flight test, the inspector shall attach two medical certificates to the test package. One certificate contains the allowance for the applicant to hold a medical certificate while taking the flight test. The inspector should issue this certificate with the limitation, "FOR MEDICAL FLIGHT TEST PURPOSES ONLY," and have the applicant sign the certificate before the flight. The second medical certificate should be issued by the inspector if the airman successfully passes the test.

C. *FAA Form 8500-15, "Statement of Demonstrated Ability."* The *FAA Form 8500-15* is a waiver with a limitation that is provided by the authorizing medical office. Inspectors should ensure that the *FAA Form 8500-15* has been previously signed by the flight surgeon and that it is dated with the same date as the LOA. The

of the application (see figure 5.9.7.7.). The inspector should send the original application to AVN-460 in Oklahoma City.

E. *FAA Form 8060-4, "Temporary Airman Certificate" or FAA Form 8060-5, "Notice of Disapproval."* These forms must be completed, as applicable. When the special medical flight test has been satisfactorily completed, the inspector shall issue or reissue a pilot certificate. The inspector must confer with AAM-300, if the airman's certificate must bear any operational limitations. These operating limitations shall be entered on *FAA Form 8060-4, "Temporary Airman Certificate"* (figure 5.9.7.8.). The inspector should send the original form to AVN-460 in Oklahoma City and give a copy to the airman.

**NOTE:** When the pilot certificate portion of the test is failed, the inspector should place the operating limitations on the *FAA Form 8060-5, "Notice of Disapproval,"* so that after a successful retest, an inspector or examiner will know the appropriate operational limitations to place on the temporary certificate (see figure 5.9.7.9.).

794. - 804. RESERVED.

REF: PI 715854

JOHN SMITH has been authorized to arrange with you for a Signal Light Test, second-class.

The appropriate test procedure is outlined in [insert appropriate reference for Order 8400.10, Air Transportation Operations Inspector's Handbook]. Any testing that would assist you in determining the applicant's ability is authorized.

An FAA Form 8500-9, "Medical Certificate" and an FAA Form 8500-15, "Statement of Demonstrated Ability" (waiver) are enclosed for issuance to the applicant upon successful completion of the test. In borderline situations, you may elect to return the medical certificate and waiver with your report to this office for further consideration.

Please destroy this authorization if a response is not received from the applicant after 6 months from the above date.

Sincerely,

[name of supervisor]  
Supervisor, Medical Review Section

Enclosures

<b>I. Application Information</b> <input type="checkbox"/> Student <input type="checkbox"/> Instrument <input type="checkbox"/> Glider <input type="checkbox"/> Ground Instructor <input type="checkbox"/> Recreational <input type="checkbox"/> Additional Aircraft Rating <input type="checkbox"/> Lighter-Than-Air <input type="checkbox"/> Medical Flight Test <input type="checkbox"/> Private <input type="checkbox"/> Airplane Single-Engine <input type="checkbox"/> Flight Instructor _____ Initial _____ Renewal <input type="checkbox"/> Reexamination <input type="checkbox"/> Commercial <input type="checkbox"/> Airplane Multiengine <input type="checkbox"/> Flight Instructor Reinstatement <input type="checkbox"/> Reissuance of _____ Certificate <input type="checkbox"/> Airline Transport <input type="checkbox"/> Rotorcraft <input type="checkbox"/> Additional Instructor Rating <input type="checkbox"/> Other _____																		
A. Name (First, Middle, Last)				B. SSN		C. Date of Birth Mo. Day Year		D. Place of Birth										
E. Address  City, State, Zip Code				F. Nationality <input type="checkbox"/> USA <input type="checkbox"/> Other _____				G. Do you read, speak and understand English? <input type="checkbox"/> Yes <input type="checkbox"/> No										
H. Height In.		I. Weight Lbs.		J. Hair		K. Eyes		L. Sex <input type="checkbox"/> Male <input type="checkbox"/> Female										
M. Do you now hold, or have you ever held An FAA Pilot Certificate? <input type="checkbox"/> Yes <input type="checkbox"/> No		If yes, has certificate ever been Suspended or Revoked? <input type="checkbox"/> Yes <input type="checkbox"/> No		N. Grade Pilot Certificate		O. Certificate Number		P. Date Issued										
Q. Do you hold a Medical Certificate? <input type="checkbox"/> Yes <input type="checkbox"/> No		R. Class of Certificate		S. Date Issued		T. Name of Examiner												
U. Have you ever been convicted for violation of any Federal or State statutes pertaining to narcotic drugs, marijuana, and depressant or stimulant drugs or substances, or motor vehicle operation involving alcohol related offenses? <input type="checkbox"/> No <input type="checkbox"/> Yes								V. Date of Final Conviction										
Glider or Free Balloon Pilots only:				Medical Statement: I have no known physical defect which makes me unable to pilot a glider or free balloon				W. Signature		X. Date								
<b>II Certificate or Rating Applied For on Basis of:</b>																		
<input type="checkbox"/> A. Completion of Required Test		1. Aircraft to be used (if flight test required)				2a Total time in this aircraft hours		2b Pilot in command hours										
<input type="checkbox"/> B. Military Competence Obtained in		1 Service		2 Date Rated		3 Rank or Grade and Service Number												
		4 Has flown at least 10 hours as pilot in command during the past 12 months in the following military aircraft.																
<input type="checkbox"/> C. Graduate of Approved Course		1 Name and Location of Training Agency						2 Agency School Number										
		3 Curriculum From Which Graduated						4 Date										
<input type="checkbox"/> D. Holder of Foreign License Issued By		1 Country		2 Grade of License				3 Number										
		4 Ratings																
<b>III Record of Pilot time (Do not write in the shaded areas.)</b>																		
	Total	Instruction Rec'd	Solo	Pilot in Command	Second in Command	Cross Country Instruction Received	Cross Country Solo	Cross Country Pilot in Command	Instrument	Night Instr. Rec'd	Night Take-off/Landing	Night Pilot in Command	Night Takeoff/Landing Pilot in Command	Number of Flights	Number of Aero-Tows	Number of Ground Launches	Number of Powered Launches	Number of Free Flights
Airplane																		
Rotor-Craft																		
Glider																		
Lighter than Air																		
Training Device Simulator																		
<b>IV Have you failed a test for this certificate or rating within the past 30 days?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No																		
<b>V Applicant's Certification</b> I certify that the statements made by me on this application are true.								A. Signature		B. Date								
<b>FAA Use Only</b>																		
EMP	REG	D.O.	SEAL	CON	ISS	ACT	LEV	TR	S.H	SRCH	#RTE	RATING (1)						

FAA Form 8710-1 (6-89) Supersedes Previous Edition

**STATEMENT OF DEMONSTRATED ABILITY**  
*This form cannot be used in lieu of a medical certificate; it should be attached to your medical certificate.*

**AIRMAN'S NAME AND ADDRESS**

**CLASS OF MEDICAL  
CERTIFICATE  
AUTHORIZED**

**WAIVER SERIAL NO.**

**LIMITATIONS**

**PHYSICAL DEFECTS**

**BASIS OF  
ISSUANCE**

☐

**OPERATIONAL  
EXPERIENCE**

☐

**SPECIAL PRAC-  
TICAL TEST**

☐

**SPECIAL  
FLIGHT TEST**

☐

**FOR THE FEDERAL AIR SURGEON**

**DATE**

**SIGNATURE (TO BE SIGNED IN INK)**

**NAME AND TITLE (TO BE TYPED)**

**FAA FORM 8500-15 (12-69) FORMERLY FAA FORM 779**

Department of Transportation  
Federal Aviation Administration  
**MEDICAL CERTIFICATE** \_\_\_\_\_ **CLASS**

This certifies that (Full name and address):

Date of Birth	Height	Weight	Hair	Eyes	Sex

has met the medical standards prescribed in Part 67, Federal Aviation Regulations for this class of Medical Certificate.

Limitations

Date of Examination

Examiner's Serial No.

Examiner

Signature

Typed Name

**AIRMAN'S SIGNATURE**

**FAA Form 8500-9** (1-91) Supersedes Previous Edition



<p><b>RIGHT</b></p> <p><b>1000 feet</b></p>		<p><b>FROM APPLICANT</b></p>
<p><b>1500 feet</b></p>		

NAME OF PERSON TESTED		NAME OF INSPECTOR
FLIGHT TEST REPORT		
DATE	TYPE OF AIRMAN CERTIFICATE	CLASS OF MEDICAL CERTIFICATE
TYPE AND MODEL OF AIRCRAFT EMPLOYED		H.P.
DESCRIPTION (In those cases requiring the wearing of correcting lenses, state at the beginning of the description of each portion of the test whether or not lenses were worn during that portion.)		

FAA Form 8500-13 (11-68) Formerly FAA Form 1514.

This applicant is recommended for certification or rating without further _____ test.				
Date	Agency Name and Number	Official's Signature		
		Title		
<b>Designated Examiner's Report</b>				
<input type="checkbox"/> Student Pilot Certificate Issued ( <i>Copy attached</i> ) <input type="checkbox"/> I have personally reviewed this applicant's pilot logbook, and certify that the individual meets the pertinent requirements of FAR 61 for the pilot certificate or rating sought. <input type="checkbox"/> I have personally reviewed this applicant's graduation certificate, and found it to be appropriate and in order, and have returned the certificate. <input type="checkbox"/> I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.				
<input type="checkbox"/> Approved—Temporary Certificate Issued ( <i>Copy Attached</i> ) <input type="checkbox"/> Disapproved—Disapproval Notice Issued ( <i>Copy Attached</i> )				
Location of Test (Facility, City, State)			Duration of Test	
			Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
Date	Examiner's Signature	Certificate No.	Designation No.	Designation Expires
<b>Evaluator's Record For Airline Transport Certificate/Rating Only</b>				
		Inspector	Examiner	Date
Oral	<input type="checkbox"/>	<input type="checkbox"/>	_____	
Simulator Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	
Aircraft Flight Check	<input type="checkbox"/>	<input type="checkbox"/>	_____	
<b>Inspector's Report</b>				
I have personally tested this applicant in accordance with pertinent procedures and standards, with the result indicated below.				
<input type="checkbox"/> <b>Approved</b> —Temporary Certificate Issued <input type="checkbox"/> <b>Disapproved</b> —Disapproval Notice Issued				
Location of Test (Facility, City, State)			Duration of Test	
			Ground	Flight
Certificate or Rating for Which Tested		Type(s) of Aircraft Used	Registration No.(s)	
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Student Pilot Certificate issued  <input type="checkbox"/> Examiner's Recommendation  <input type="checkbox"/> ACCEPTED   <input type="checkbox"/> REJECTED  <input type="checkbox"/> Examiner Recommends Retesting  <input type="checkbox"/> Reissue or Exchange of Pilot Certificate  <input type="checkbox"/> Special medical test conducted—report forwarded to Aeromedical Certification Branch, AAM-130             </div> <div style="width: 30%;"> <input type="checkbox"/> Certificate or Rating Based on  <input type="checkbox"/> Military Competence  <input type="checkbox"/> Foreign License  <input type="checkbox"/> Approved Course Graduate  <input type="checkbox"/> Issued  <input type="checkbox"/> Denied             </div> <div style="width: 30%;"> <input type="checkbox"/> Instructor   <input type="checkbox"/> Flight   <input type="checkbox"/> Ground  <input type="checkbox"/> Renewal   <input type="checkbox"/> Approved  <input type="checkbox"/> Reinstatement   <input type="checkbox"/> Disapproved  <b>Instructor Renewal Based on</b>  <input type="checkbox"/> Activity   <input type="checkbox"/> Training Course  <input type="checkbox"/> Acquaintance   <input type="checkbox"/> Test             </div> </div>				
Training Course (FIRC) Name		Graduation Certificate No.	Date	
Date	Inspector's Signature	FAA District Office		
<b>Attachments:</b>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> <input type="checkbox"/> Student Pilot Certificate (copy)    <input type="checkbox"/> Airmans Identification (ID)  <input type="checkbox"/> Report of Written Examination  <input type="checkbox"/> Temporary Pilot Certificate (copy)             </div> <div style="width: 35%;"> <input type="checkbox"/> Notice of Disapproval  <input type="checkbox"/> Superseded Pilot Certificate  <input type="checkbox"/> Answer Sheet Graded  <input type="checkbox"/> Answer Sheet Graded (Foreign Instrument)             </div> </div>				
<div style="display: flex; justify-content: space-between;"> <div style="width: 60%;"> Form of ID _____  Number _____  Expiration Date _____             </div> <div style="width: 35%;"></div> </div>				

# ii. TEMPORARY AIRMAN CERTIFICATE

THIS CERTIFIES THAT IV.  
V.

DATE OF BIRTH	HEIGHT	WEIGHT	HAIR	EYES	SEX	NATIONALITY	VI.
	IN.						

IX. has been found to be properly qualified and is hereby authorized in accordance with the conditions of issuance on the reverse of this certificate to exercise the privileges of

RATINGS AND LIMITATIONS  
XII.

XIII.

THIS IS ☐ AN ORIGINAL ISSUANCE ☐ A REISSUANCE OF THIS  
GRADE OF CERTIFICATE

DATE OF SUPERSEDED AIRMAN CERTIFICATE

BY DIRECTION OF THE ADMINISTRATOR

X. DATE OF ISSUANCE

X. SIGNATURE OF EXAMINER OR INSPECTOR

EXAMINER'S DESIGNATION NO. OR  
INSPECTOR'S REG. NO.

DATE DESIGNATION EXPIRES

vii. AIRMAN'S SIGNATURE

FAA Form 8060-4 (8-79) USE PREVIOUS EDITION

NOTICE OF DISAPPROVAL OF APPLICATION		PRESENT THIS FORM UPON APPLICATION FOR REEXAMINATION	
NAME AND ADDRESS OF APPLICANT		CERTIFICATE OR RATING SOUGHT	
On the date shown, you failed the examination indicated below: <input type="checkbox"/> FLIGHT <input type="checkbox"/> ORAL <input type="checkbox"/> PRACTICAL			
AIRCRAFT USED ( <i>Make and Model</i> )		FLT. TIME RECORDED IN LOGBOOK	
		PILOT-IN-COMM. OR SOLO	INSTRUMENT      DUAL
UPON REAPPLICATION YOU WILL BE REEXAMINED ON THE FOLLOWING:			
I have personally tested this applicant and deem his performance unsatisfactory for the issuance of the certificate or rating sought.			
DATE OF EXAMINATION	SIGNATURE OF EXAMINER OR INSPECTOR	DESIGNATION OR OFFICE NO.	

FAA Form 8060-5 (4-82)

[PAGES 5-674 THROUGH 5-684 RESERVED]



1. Introduction .....	6-1
3. Objective of Surveillance Programs .....	6-1
5. Planning and Executing Surveillance Programs .....	6-1
7. Surveillance Planning and Evaluation Responsibilities .....	6-4
9. Determining Inspection Requirements .....	6-4
11. Evaluation of Inspection Results .....	6-6
12.-24. Reserved .....	6-7

## Section 2. REPORTING ON SURVEILLANCE

25. Introduction .....	6-15
27. Background .....	6-15
29. Objectives of PTRS .....	6-16
31. The Components of PTRS .....	6-16
33. Using the PTRS Comment Codes .....	6-21
35. Selection of Appropriate Primary Area and Key Word List Codes .....	6-21
37. Determining the Actual Issue of a Comment .....	6-23
39. Inspector Opinion Codes ("U","P","I","E") .....	6-25
41. Inspector's Narrative Comment .....	6-26
43. Supervisor/Management Responsibilities .....	6-27
44.-50. Reserved .....	6-27

## CHAPTER 2. SPECIFIC TYPES OF INSPECTIONS

### Section 1. GENERAL INSPECTION PRACTICES AND PROCEDURES

101. General .....	6-127
103. Objective of an Inspection .....	6-127
105. Characteristics of an Inspection .....	6-127
107. Conducting an Inspection .....	6-127
109. Guidance for the Conduct of Specific Types of Inspections .....	6-129
110.-120. Reserved .....	6-129

127. Specific Ramp Inspection Practices and Procedures .....	6-138
129. Ramp Inspection Job Aid .....	6-141
130.-140. Reserved .....	6-141

### Section 3. CABIN EN ROUTE INSPECTIONS

141. Objective of Cabin En Route Inspections .....	6-149
143. Management of Cabin En Route Surveillance .....	6-149
145. Cabin En Route Inspection Areas .....	6-149
147. General Cabin En Route Inspection Practices and Procedures .....	6-150
149. Specific Cabin En Route Inspection Practices and Procedures .....	6-150
151. Cabin En Route Inspection Job Aid .....	6-155
152.-160. Reserved .....	6-155

### Section 4. COCKPIT EN ROUTE INSPECTIONS

161. Objective of En Route Inspections .....	6-167
163. Cockpit En Route Inspection Areas .....	6-167
165. General Cockpit En Route Inspection Practices and Procedures .....	6-168
167. Specific Cockpit En Route Inspection Practices and Procedures .....	6-169
169. Cockpit En Route Inspection Job Aid .....	6-172
170.-180. Reserved .....	6-172

### Section 5. OPERATOR TRIP RECORDS INSPECTIONS (PTRS CODE 1628)

181. General .....	6-181
183. Part 121 Operator Trip Records Requirements .....	6-181
185. Part 135 Operator Trip Records Requirements .....	6-183
187. Trip Records Inspection Areas .....	6-184
189. General Inspection Practices and Procedures .....	6-184
191. Specific Inspection Practices and Procedures .....	6-185
192.-200. Reserved .....	6-185



207. Periodic Review of Manuals .....	6-200
208.-218. Reserved .....	6-200

## Section 7. OVERWATER EN ROUTE INSPECTIONS (PTRS CODE 1624)

219. General .....	6-213
221. Background .....	6-213
223. Definition of Terms .....	6-213
225. Flight Planning .....	6-214
227. Cockpit Set-up .....	6-214
229. Gateway Procedures .....	6-215
231. Waypoint Changeover Procedures .....	6-215
233. After Arrival Procedures .....	6-215
235. Navigation Contingency Procedures .....	6-215
237. Aircraft Performance .....	6-216
239. Flight Release Rules .....	6-216
241. Inspector Assistance .....	6-216
242.-252. Reserved .....	6-216

## Section 8. PROFICIENCY AND COMPETENCY CHECK INSPECTIONS (PTRS CODE 1632)

253. General .....	6-229
255. Objectives of Proficiency and Competency Check Inspections .....	6-229
257. Proficiency and Competency Check Procedures and Guidance .....	6-229
259. Inspector Responsibilities During Check Airman Observations .....	6-231
261. Deficiencies .....	6-231
263. Recording Proficiency and Competency Check Surveillance on the PTRS System .....	6-232
264.-274. Reserved .....	6-233

## Section 9. CREW AND DISPATCHER RECORDS INSPECTIONS (PTRS CODE 1627)

275. General .....	6-249
277. Procedures for Conducting a Records Inspection .....	6-249
279. Categories of Records .....	6-250

## Section 11. BASE INSPECTIONS (PTRS CODE 1616)

315. General .....	6-285
317. Definition .....	6-285
319. Location of Inspection .....	6-285
321. Planning a Base Inspection .....	6-285
323. Inspection Preparation .....	6-285
325. Notification of Inspection .....	6-285
327. Conduct of Inspection .....	6-286
329. Debriefing .....	6-286
331. PTRS Input .....	6-287
333. Future Activities .....	6-287
334.-344. Reserved .....	6-287

## Section 12. OBSERVATION OF AIR CARRIER OPERATIONS FROM AIR TRAFFIC CONTROL (ATC) FACILITIES (PTRS CODE 1845)

345. Objective .....	6-299
347. General .....	6-299
349. PTRS Input .....	6-299
350.-360. Reserved .....	6-299

## Section 13. INSPECTION PROCEDURES DURING AIRLINE STRIKES, LABOR UNREST, FINANCIAL STRESS (PTRS CODE 1629)

361. General .....	6-311
363. Resource Management .....	6-311
365. Release of Information .....	6-311
367. Report and Analysis Function .....	6-311
368.-378. Reserved .....	6-312

\*(TBD) = TO BE DEVELOPED

401. General .....	6-347
403. Specific Line Check Inspection Practices and Procedures .....	6-347
405. Use of Job Aid .....	6-347
407. PTRS Input .....	6-348
408.-418. Reserved .....	6-348

#### Section 16. PART 121 PILOT-IN-COMMAND (PIC) OPERATING EXPERIENCE OBSERVATIONS (PTRS CODES 1356 AND 1631)

419. General .....	6-359
421. Scheduling Policies .....	6-359
423. Practices and Procedures .....	6-359
425. PTRS Input .....	6-360
426.-436. Reserved .....	6-360

#### Section 17. TRAINING PROGRAM INSPECTIONS (PTRS CODE 1626)

437. General .....	6-371
439. Training Program Inspection Practices and Procedures .....	6-371
440.-450. Reserved .....	6-374

#### Section 18. OPERATIONAL CONTROL INSPECTIONS (PTRS CODE 1636)

451. Background .....	6-387
453. Objective .....	6-387
455. Practices and Procedures .....	6-388
456.-466. Reserved .....	6-388

#### Section 19. STATION FACILITIES INSPECTIONS (PTRS CODE 1635)

467. General .....	6-417
469. Management of Station Facilities Inspections .....	6-417

\*(TBD) = TO BE DEVELOPED

487. General .....	6-435
489. Applicable Regulations .....	6-435
491. Location and Disposition .....	6-435
493. Trip Records Inspections .....	6-436
494.-504. Reserved .....	6-438

tion that the operator has complied with regulatory training and qualification requirements. The inspection shall establish whether or not the operator is keeping the required records and whether or not the required training and qualification events are being conducted. Before conducting a records inspection, inspectors must be thoroughly familiar with volume 3, chapter 11 of this handbook, FAR 121.401(c) and FAR 121.683 or FAR 135.63 as applicable, and this section.

**277. PROCEDURES FOR CONDUCTING A RECORDS INSPECTION.** This paragraph contains a general description of the procedures inspectors will use when conducting records inspections. Inspectors may modify these guidelines to meet local conditions.

**A. Location.** Inspectors normally conduct a records inspection at the place where the operator maintains the records. The inspection process does not require that the operator surrender records, even temporarily, and records may not be removed from the operator's premises without the operator's permission. Should an agreement be reached for inspectors to remove records, the operator must be given an itemized receipt for all records.

**B. Preparation and Initial Briefing.** Normally, advance notice, to the operator, of a planned records inspection is appropriate.

(1) An introduction and initial briefing should be given to the operator. The briefing should describe the purpose of the inspection, what records will be required, and that a debriefing will take place at the conclusion of the inspection.

(2) Prior to conducting any records inspections, inspectors must become familiar with the operator's system of recordkeeping and become familiar with which specific records are available at the facility. This familiarization is particularly important when the operator is using a

from an employee's assigned duties. Pre-planning and preparation for a records inspection reflect positively on the professionalism of the FAA and should result in as little disruption to the operator's work routine as possible.

**NOTE: Information from previous records inspections that are contained in the Program Tracking and Reporting Subsystem (PTRS) should be accessed to aid the inspector in determining the strategy and scope of the inspection.**

**C. Records Selection.** Before conducting a records inspection, inspectors must determine the number of records to be examined, which categories of the records that will be inspected, and to what depth records will be scrutinized.

(1) Chapter 1, section 1 of this volume provides general guidance to inspectors for determining the actual number of records to examine.

(2) Inspectors may obtain information on crewmember and dispatcher population from the Vital Information Subsystem (VIS).

**D. Records Handling.** Care should be taken to keep records as intact as the operator presents them. The preferred procedure is for inspectors to take only a few records at a time, examine them, then return that batch to the operator before starting on another batch. If it is necessary or desirable to obtain a copy of a record, the operator may not be willing or able to provide it. In this case, inspectors must make arrangements for copies.

**E. Errors or Omissions in Records.** A records inspection is not an investigation, yet inspectors may find errors or omissions in an operator's records. Minor errors and omissions may not constitute a lack of compliance on the part of the operator and may not require the inspector to initiate enforcement action. Some errors or omissions, though, may require further action. For example, a

operator's attention, and was corrected on the spot by the operator. The inspector should discuss, with the operator, methods for preventing a repetition of the problem and should record, in the PTRS, the operator's intended fix.

(2) If the operator cannot produce evidence that the training was conducted, the inspector shall record the facts so that an investigation according to FAA Order 2150.3 can later be opened. The inspector who discovers the discrepancy is responsible for recording the finding in the PTRS and initiating an investigation.

**279. CATEGORIES OF RECORDS.** This paragraph lists the airman and dispatcher records required by FAR's 135.63 and 121.683. Some or all of the categories are required for pilots, flight engineers, flight navigators, flight attendants, flight and ground instructors, designated examiners, check airmen and aircraft dispatchers. Volume 3, chapter 11, section 3 of this handbook gives guidance as to the retention period for each of these categories of records.

*A. Airman Training and Qualification Records.* The operator's recordkeeping procedures should be reviewed to ensure that the training and qualification required for the individual's present duty assignment is documented. Individual records should be reviewed according to the sampling plan to verify that the operator is correctly managing the training and qualification program.

(1) The training and qualification requirements of Part 121 and Part 135 can be complex (see volume 3, chapter 2, section 7 of this handbook).

(2) FAR 121.401(c) and FAR 135.323(c) require that the documentation of ground, flight, or qualification segments contain a certification by the instructor, supervisor, or check airman that the crewmember or dispatcher is knowledgeable and proficient. In an electronic record-keeping system, the certification does not have to be made

requirements of FAR 121.443, FAR 121.445 or FAR 135.229. Inspectors must also ensure that operators with the authority to conduct flights requiring Class II navigation or to operate in special-use airspace (such as MNPS, NOPAC, or CEPAC) document the successful completion of required training and qualification for each flight crewmember.

*D. Operating Experience or Operating Familiarization Records.* Documentation should verify that operating experience or operating familiarization has been accomplished.

(1) All Part 121 crewmembers and Part 135 PIC's in commuter operations must have completed the required operating experience prior to being assigned unsupervised duty in revenue service.

(2) Part 121 PIC's who have completed initial upgrade training for an operator that uses approved simulator training under 121.409(c) must have been observed by an FAA inspector during operating experience.

(3) Aircraft dispatchers must have completed operating familiarization.

*E. Recency-of-Experience Records.* This category refers to events, other than required checks, which operators must accomplish within a specified time period to remain qualified to serve in revenue operations.

(1) Pilots must complete 3 takeoffs and landings each 90 days. FAR 121.439 requires that the landings be made in type. FAR 135.247 requires that the landings be made in category and class, and, if a type rating is required, in type. FAR 135.247 also requires that a pilot complete 3 night landings within the previous 90 days to be eligible to serve at night. There is no requirement for night landings in Part 121 operations.

(2) Flight engineers must have acquired 50 hours or a proficiency check within the past 6 months.

G. *Special Training and Testing Requirements.* The inspector should observe that operators that conduct such operations as air ambulance operations keep records of specialized training.

282. - 292. RESERVED.

[PAGES 6-252 THROUGH 6-262 RESERVED]





[PAGES 6-264 THROUGH 6-284 RESERVED]



single-base supplemental operators. Operators must meet the same minimum requirements during a base inspection as they do for original certification.

**NOTE: A more effective way for the FAA to inspect Part 121 operators and Part 135 commuter operators, rather than by conducting base inspections, is for the FAA to establish a series of specific, independent inspections predicated on the environmental information for the operator at each particular location.**

**317. DEFINITION.** A base inspection is an important surveillance function which provides the FAA with a comprehensive review of all of an operator's activities. It can encompass, in a single inspection, some or all of the specific inspection areas that are described in chapter 2 of this volume.

**319. LOCATION OF INSPECTION.** A base inspection is usually conducted at the operator's main base of operations or place of business. In some cases, operators may elect to retain selected records at different locations, such as at an office located in a residence, at an office building, or in portable files. The locations may differ as widely as the operators' activities differ.

**321. PLANNING A BASE INSPECTION.** The method used to conduct a base inspection depends on the organizational structure of the operator at a specific location as identified in the Vital Information Subsystem (VIS) or in the environmental file.

*A. Surveillance Activities.* The size and complexity of the operations at a particular location will dictate which surveillance items are to be examined during a base inspection. A base inspection may be completed over several days or during a single visit and may often be conducted in conjunction with a proficiency or competency check. When possible, airworthiness and operations inspectors should jointly conduct base inspections.

(1) Base inspections are usually conducted as part of the annual work program.

(2) Additional inspections may be initiated by the certificate-holding district office (CHDO) in response to complaints or special emphasis items directed by FAA regional or headquarters personnel.

**323. INSPECTION PREPARATION.** Prior to conducting a base inspection, the inspector should review the operator's district office file, the VIS, the Program Tracking and Reporting Subsystem (PTRS), and the Aviation Safety Analysis System (ASAS) to become familiar with the following information:

- Current and appropriate air carrier or operating certificate
- Current and appropriate operations specifications (OpSpecs)
- General correspondence with the operator
- Previous inspections and proficiency check records for possible problem areas, accident history, violation history
- Any applicable manuals

**NOTE: Single pilot operators are not required to have a manual, although some may elect to have one. A basic Part 135 operator may not have all the required parts of a manual if the CHDO has granted to the operator a deviation from this requirement.**

**325. NOTIFICATION OF INSPECTION.** The inspector should notify the operator to arrange a time when the appropriate personnel and aircraft will be available for the inspection. Notification is important if the inspector plans to interview company personnel. In some cases, notification

operators conduct business in a variety of ways, it is not necessary to identify each item that must be examined during a base inspection. The job aid in figure 6.2.11.1. (TBD) will aid the inspector in accomplishing a base inspection and can be used to record the results in the PTRS. To complete a base inspection, inspectors should examine, as a minimum, the items that follow.

A. *Operating Certificate.* The inspector should examine the operator's original operating certificate, particularly the date and certificate number, and determine whether or not it matches the office copy. If the original operating certificate is not available, the inspector should determine its location and schedule a time to inspect it.

B. *OpSpecs.* The inspector should review the operator's current OpSpecs and ensure that the issue date is the same as that of the CHDO's copy. If the original OpSpecs are not available, the inspector should determine their location and schedule a time to inspect them.

C. *Operations Manual.* If the operator has either partial or full manuals that provide guidance for flight or ground personnel, the inspector should complete an inspection of the manuals, as applicable.

(1) When the operator does not have a manual, or when there is only a part of a manual, the inspector should determine whether or not the operator has deviation authority by OpSpecs.

(2) The inspector should determine whether or not manual procedures are being followed by interviewing operator personnel or by observing employees in the performance of their duties.

D. *Records.* The inspector should conduct the following records inspections by using the applicable guidance provided in this handbook:

- Operations records (see volume 6, chapter 2, section 20)

E. *Aircraft.* If practical, the inspector should examine, during a base inspection, the aircraft used by the operator. In addition to inspecting the aircraft to determine whether or not it is in airworthy condition, the inspector should examine the following items for compliance:

- Airworthiness certificate and registration
- Airplane limitations and required placards
- Approved aircraft flight manual (AFM) or company flight manual (CFM) carried on board
- Empty weight and center of gravity (CG) calculated

**NOTE: Multiengine aircraft that are operated under Part 135 must be weighed each 36 months.**

- Instruments and equipment
- Operable required equipment (unless an airworthiness directive (AD) provides otherwise)
- The approved minimum equipment list (MEL) and its use as authorized by the OpSpecs (if applicable)
- Aircraft records available for inspection

**NOTE: Some operators may elect to retain aircraft maintenance records at the location where maintenance is performed; this location may differ from the operator's main base of operations.**

**329. DEBRIEFING.** The inspector should plan to debrief

B. The inspector must be clear when indicating any areas which the operator must correct before further operations can be conducted.

C. The inspector should advise the operator that a formal letter containing a listing of the discrepancies will be sent to the operator and made part of the permanent file.

**331. PTRS INPUT.** The inspector should record the results of the base inspection in the PTRS by using activity code 1616. The entry should include, in the comment

generate followup action. If the findings warrant such action, the inspector should implement the following corrective measures:

- Surveillance to verify the operator's correction of discrepancies
- An adjustment of the operator's planned work program
- The initiation of an enforcement investigation report, if applicable.

**334. - 344. RESERVED.**

**[PAGES 6-288 THROUGH 6-298 RESERVED]**



**NOTE:** Inspectors are not authorized to conduct inspections of ATC facilities. Inspectors may, however, comment on their observations of these facilities and related ATC procedures through the Program Tracking and Reporting Subsystem (PTRS).

**347. GENERAL.** This section contains guidance to be used by aviation safety inspectors (ASI's) on the observation of air carrier operations at air traffic service facilities. The workload in control towers, terminal instrument flight rules (IFR) rooms, and air route traffic control centers is especially demanding during instrument weather conditions and peak operational periods. Inspectors should be careful to avoid distracting controllers from the performance of their duties.

**A. Coordination.** The inspector should contact the air traffic facility to coordinate the observation.

**B. Observations.** Inspectors are encouraged to observe operations during IFR weather conditions and during peak operating periods. Inspectors should observe and note the following performance elements:

procedures, ATC instructions, and weather minimums

- Reasons for any missed approaches
- Effectiveness of airport visual aids: lights, signs and markings for ramps, taxiways, and runways
- Effectiveness and dissemination of weather reports
- Effectiveness of reports on the conditions affecting airport operations
- Problems observed by ATC personnel

**349. PTRS INPUT.** Inspectors should record the activity by using code 1845. In addition, any observed discrepancies should be included in the comment section.

**NOTE:** The information contained in this report will not necessarily download to the appropriate FAA office; therefore, it may be necessary to notify the appropriate FAA office by an alternate method (such as by telephone or letter).

**350. - 360. RESERVED.**

**[PAGES 6-300 THROUGH 6-310 RESERVED]**





decide that the public interest requires a higher-than-normal level of surveillance of specific operators.

A. *Reporting Safety Concerns.* The National Field Office (AFS-500) maintains a system to analyze financial data reported to the Department of Transportation by Part 121 operators. Regional flight standards division (RFSD) managers, certificate-holding district office (CHDO) managers, and principal operations inspectors (POI's) must also be alert to events which raise questions about an operator's ability to safely conduct operations. Information may appear in normal surveillance reports, reports from the public, or reports from other responsible sources. When managers or POI's become concerned about an operator's ability to safely conduct operations, they shall notify the RFSD manager. When a Part 121 operator or Part 135 commuter operator is involved, the RFSD manager shall notify AFS-500.

B. *Initiation of Increased Surveillance.* AFS-500 is responsible for initiating increased levels of surveillance of Part 121 operators and Part 135 commuter operators. RFSD managers are responsible for increasing the level of surveillance of Part 135 on-demand operators. When an RFSD manager initiates increased surveillance of a Part 135 on-demand operator, the RFSD manager shall notify AFS-500.

C. *Surveillance Plan.* When AFS-500 or the RFSD manager decides to initiate a program of increased surveillance, the RFSD and the CHDO must then develop that program (see figure 6.2.13.1.). The details of surveillance plans of Part 121 operators and Part 135 commuter operators shall be forwarded by the CHDO to AFS-500, through the RFSD, for coordination prior to implementation.

**363. RESOURCE MANAGEMENT.** FAA resources are

normal surveillance activity to accomplish the special requirements. This situation may exist for an extended period of time; therefore, FSDO managers should coordinate priorities with their RFSD manager.

**365. RELEASE OF INFORMATION.** In the course of conducting special surveillance, an inspector inevitably acquires special knowledge about the operator and forms private opinions. Inspectors and managers should not, however, express their personal opinions or discuss any findings with the press or members of the public. Inspectors should refer all public inquiries regarding the status of FAA activities to the appropriate regional public affairs office.

**367. REPORT AND ANALYSIS FUNCTION.** The two types of reports that are required as a result of an increased surveillance effort are the Program Tracking and Reporting Subsystem (PTRS) data entry and a weekly status report to AFS-500.

A. *PTRS Activity Reporting.* During a period of increased surveillance, inspectors should record in the PTRS system any surveillance activity that is conducted on the affected operator. The inspector shall enter activity code 1629 in the tracking field, which distinguishes the activity as being part of a group of increased surveillance. All PTRS activities must be entered on a daily basis.

(1) *Specific Inspection Activities.* Inspectors shall record each specific surveillance activity, such as a ramp inspection (code 1622) or an en route inspection (code 1624), by using the appropriate PTRS activity code in the activity field and code 1629 in the tracking field.

(2) *Non-Specific Surveillance.* General surveillance activities not otherwise identified with a specific activity code will be recorded by the inspectors by entering activity code 1629 in the activity field and in the tracking field.

PTRS	DESCRIPTION	CHDO	OTHERS	TOTAL
1622	Ramp	2	0	2
1624	En Route-Cockpit	8	4	12
1635	Facilities	1	6	7
TOTAL		11	10	21

(2) *Comments.* In addition to the numerical data, the weekly status report should include significant comments pertaining to any area of concern that the originator feels is appropriate. Significant comments may include the following:

- Aircraft/route acquisitions
- Status of reorganizations/mergers/buy-outs
- Changes in management personnel, equipment
- Labor/management issues
- Changes in financial condition
- Current compliance status
- Any pending enforcement cases
- Other areas reflecting a change in the carrier status
- Newsworthy items

*C. Resumption of Normal Operations.* After the strike, labor unrest, or financial distress has been resolved, normal operations may not be resumed for several weeks. During the transition to normal operations, however, it may be desirable for the FAA to revise the level of surveillance of the operator. It is important that internal FAA coordination be maintained to ensure implementation of the appropriate level of surveillance. The POI, CHDO, RFSD, and AFS-500 will determine when surveillance of the operator will resume to a normal level.

**368. - 378. RESERVED.**

PHASE II. IDENTIFY SURVEILLANCE ACTIVITIES

1. OPERATOR FACILITY INSPECTION .....	PTRS CODE
• MAIN BASE .....	1616
• LINE/STATION .....	1617
• SUB BASE .....	1618
2. OPERATOR SPECIFIC INSPECTIONS	
• MANUAL/PROCEDURES .....	1621
• RAMP .....	1622
• COCKPIT EN ROUTE .....	1624
• CABIN EN ROUTE .....	1625
• TRAINING PROGRAMS .....	1626
• CREW/DISPATCHER RECORDS .....	1627
• TRIP RECORDS .....	1628
• STRIKE/LABOR/FINANCIAL .....	1629
• SIM/TRAINING DEVICES .....	1630
• CHECK AIRMAN .....	1631
• PROFICIENCY/COMP CHECK .....	1632
• LINE CHECK .....	1633
• FACILITY .....	1635
• DISPATCH/FLT FOL/FLT LOC .....	1636
• FLIGHT ENGINEER EXAMINER .....	1668
• APD DESIGNEES .....	1672
• NON CERT/ FOREIGN ARPTS .....	1681

PHASE III. SURVEILLANCE PROGRAM

1. APPROVAL
  - CHDO \_\_\_\_\_
  - RFSD \_\_\_\_\_
  - AFS-500 \_\_\_\_\_
2. DISTRIBUTION
3. IMPLEMENTATION

PHASE IV. REPORTING AND ANALYSIS

PHASE V. TERMINATION

- CHDO \_\_\_\_\_
- RFSD \_\_\_\_\_
- AFS-500 \_\_\_\_\_

---

[PAGES 6-314 THROUGH 6-324 RESERVED]



[PAGES 6-326 THROUGH 6-346 RESERVED]



inspection practices and procedures).

**403. SPECIFIC LINE CHECK INSPECTION PRACTICES AND PROCEDURES.** The operator is responsible for administering both initial and recurrent line checks. In some situations, though, an FAA inspector may administer a line check, especially when an operator is not authorized to have its own check airman, such as a Part 135 single pilot operator or single pilot-in-command (PIC) operator. FAA inspectors may also need to administer the initial line check when a new type of aircraft is being introduced into either Part 121 or Part 135 service.

*A. Inspector Qualifications.* Aviation safety inspectors (ASIs) must be qualified in the category and class of the aircraft in which the line check is to be conducted. If the aircraft requires a type rating, the inspector must hold the type rating to conduct initial, transition, or upgrade line checks. For recurring checks, the inspector must be qualified in category and class. In any operation in which the inspector occupies a pilot seat as a required crewmember, the inspector must be both qualified and current in that type of aircraft.

*B. Inspector Preparation.* Inspectors should prepare for conducting line checks by completing the following steps:

(1) *Familiarization.* The inspector should become familiar with the operator's procedures before conducting the line check. The operator's manuals and operations specifications (OpSpecs) are sources for this information.

(2) *Timeframe.* The inspector should plan to arrive in sufficient time to complete the necessary jumpseat procedures, meet the flightcrew, inspect airman and medical certificates, and observe preflight duties. Inspectors should use the Cockpit En Route Inspection Job Aid (figure 6.2.4.1.) while conducting these inspections (see

figure 6.2.4.1.). The flight must be over a typical route served by the operator and must allow the inspector to observe the PIC perform the duties and responsibilities associated with the conduct of a revenue flight.

**NOTE:** It may be desirable to have the PIC fly two flight segments or to perform the duties of the pilot-not-flying (PNF) during a second segment while the second-in-command (SIC) performs the duties of the pilot flying.

*D. Debriefing.* After completion of the flight, inspectors should debrief the PIC. The inspector is required to comment on any procedure believed to be deficient or unsafe. The inspector must use discretion, however, when debriefing crewmembers or commenting about procedures that the FAA has approved for that operator. The inspector should enter relevant comments into the Program Tracking and Reporting Subsystem (PTRS).

*E. Documentation.* The inspector shall record the completed line check on company check ride forms or FAA Form 8410-3, "Airman Competency/Proficiency Qualification Check," and sign as the check airman. Inspectors are not required to keep copies of these forms as the PTRS serves as the FAA record.

**405. USE OF JOB AID.** The job aid for cockpit en route inspections (figure 6.2.4.1.) contains a list of items for the specific inspection areas that should be observed and evaluated. It also includes applicable PTRS key words and codes to assist the inspector in the writing of the inspection report. Items that are not listed on the job aid may also be evaluated during the inspection. In some cases, the inspector should use the "other" PTRS comment code for the appropriate inspection area. This job aid can also be used for notes during the inspection which can later be transferred to the PTRS Data Sheet.





initial equipment, or an upgrade curriculum which contains a simulator course of training. The inspector must observe the pilot while the pilot is performing the prescribed duties of a PIC before serving unsupervised in revenue service. This observation is conducted while the candidate is acquiring OE and is only required before the pilot initially assumes command in Part 121 service. The purpose of this observation is to ensure that the transfer of learning from simulator to aircraft has occurred and that the candidate has acquired the skills and judgement necessary to effectively perform command responsibilities.

**421. SCHEDULING POLICIES.** The following policies apply to scheduling FAR 121.434(c)(1)(ii) observations:

A. *Geographic Responsibility.* The flight standards district office (FSDO) having responsibility for the area in which the airman to be observed is domiciled is responsible for conducting the observation or arranging for an inspector from another office to accomplish the observation.

B. *Inspector Qualifications.* The inspector must be qualified in the category, class, and group of aircraft to be used, but does not need to be qualified in the aircraft type. An inspector must be type rated in an airplane which has a passenger capacity of 30 seats or more or a payload capacity of more than 7,500 pounds to conduct the observation on an airplane of these capacities.

C. *Scheduling Prerequisites.* The FAA observation is not the line check required by FAR 121.440; therefore, the inspector does not have to observe a line check being administered by the check airman. The preferred procedure is for an FAA inspector to observe the PIC's performance during the latter stages of OE. Earlier observation, though allowed, may result in a need for additional observation. The POI should coordinate with the operator for effective scheduling of OE observations to preclude the

**423. PRACTICES AND PROCEDURES.** The following practices and procedures shall be observed by inspectors while observing PIC candidates.

A. *Introduction.* The inspector shall meet the crew and gain access to the aircraft through the normal procedures for conducting an en route inspection. In addition, the inspector shall discuss the conduct of the flight with both the check airman and the candidate and shall review the candidate's progress to date. During the discussion, the inspector should ensure that the check airman and the candidate understand the following information:

(1) The FAA recognizes that the check airman is the PIC. The candidate, however, is expected to perform all of the duties of the PIC. The check airman is expected to act as a qualified second-in-command (SIC) and, if necessary, as an instructor.

(2) As the actual PIC, the check airman is ultimately responsible for the safety of the flight. Should a situation arise that involves in-flight safety, the check airman must take charge of the situation.

B. *Conduct of the Observation.* The inspector who performs the observation should evaluate the items specified in volume 6, chapter 2, section 4, "Cockpit En Route Inspections." The inspector should be as unobtrusive as possible during the flight and avoid intruding into the interaction between crewmembers. The inspector should not conduct oral examinations during the flight. Should an event occur that raises a question about the candidate's knowledge, the inspector should take notes and make inquiries after the flight.

C. *Post-Flight Procedures.* After the flight, the check airman and the inspector should conduct a debriefing. The check airman's comments are beneficial as the check airman is more familiar with specific company procedures.

next observation, the candidate must receive further training, and a check airman must again certify that the candidate is ready for the observation.

(2) The inspector should report an incomplete observation in the Program Tracking and Reporting Subsystem (PTRS) as an en route inspection (code 1624) with appropriate comments. Inspectors should record complete observations by using PTRS code 1631.

(3) If the inspector has indicated to the candidate that the observation is incomplete, because the candidate's

lance), with 1356 in the tracking field. When the 1631 activity code is used, the check airman shall be entered in section I. A separate PTRS entry shall be made by using the activity code 1356, with 1631 in the tracking field. When the 1356 activity code is used, the qualifying PIC shall be entered in section I. This method of using two PTRS entries is unique to the OE observation activity. Because there is no activity time associated with the 1300 series of PTRS activity codes, "Organizational Technical Administration," this method is not considered to be "double logging."

**426. - 436. RESERVED.**

**[PAGES 6-361 THROUGH 6-370 RESERVED]**

(POI's) and geographic program managers (GPM's) are required to schedule annual training program surveillance as part of a work program, in response to national program guidelines (NPG's), or when an operator's inspection reports, incidents, or accidents indicate deficiencies in crewmember or dispatcher skill or knowledge.

**NOTE:** As part of the approval process, inspectors must conduct training program inspections in phase four of the initial approval process of a training program (see volume 3, chapter 2, section 2, paragraph 335 of this handbook for more information).

A. *Training Program Inspection Areas.* Training program inspections involve much more than simply observing "training in progress." Flight Standards Service (FSS) has identified five primary inspection areas to be observed during training program inspections:

- Training curriculums
- Courseware
- Instructional delivery methods
- Testing and checking methods
- Specific topics (identified from Program Tracking and Reporting Subsystem (PTRS) data or other sources)

B. *Annual Inspection Plan.* POI's and aircrew program managers (APM's) in aircrew designated examiner (ADE) programs must develop annual inspection programs that are adapted to specific operators. Training programs vary in their complexity depending on the operator's size, aircraft fleet diversification, number of crewmembers and dispatchers, training locations, and scope of operation. POI's may find that a single annual inspection is sufficient

who, in turn, supervise those inspections conducted in their areas of responsibility.

C. *Special Inspections.* A POI may determine that there is a need to initiate a "special emphasis" training program inspection. This type of inspection may be initiated for such reasons as incidents, accidents, or a series of deficiencies discovered through trend analysis of inspection data. "Special emphasis" training program inspections are relatively short in duration and usually focus on a limited area, such as training on the use of checklists or on windshear.

**439. TRAINING PROGRAM INSPECTION PRACTICES AND PROCEDURES.** Before beginning a training program inspection, inspectors must become thoroughly familiar with the contents of volume 3, chapter 2 of this handbook. There are many methods of curriculum development and training methods that an operator may use. To obtain approval of a program, the operator must demonstrate that the program or program segment is in compliance with regulatory requirements and that it effectively prepares crewmembers and dispatchers to perform duties in revenue service. The guidance contained in volume 3, chapter 2 has been developed for this purpose. Inspectors should be aware of the competitive economic incentives operators have to improve the quality of, and to reduce the costs of, their training. Operators have great latitude in developing training programs tailored to their needs, and POI's have great latitude in approving individualized programs.

A. *Preparation.* Before conducting an inspection of a particular training program area, the inspector should first obtain a copy of the operator's approved training program outline from the POI and become familiar with it. The inspector should review the outline for regulatory compliance and for adequate subject coverage. Should the inspector discover a discrepancy that requires a modification of the outline, a report must be made to the POI by means of the PTRS. Should the inspector discover a serious

(2) Inspectors shall refrain from active participation in the training being conducted and shall make every effort not to influence the training environment or the instruction in the subject matter.

(3) Should an inspector have comments on any of the areas of training, the inspector may communicate this information to the appropriate individual(s) in private. The inspector will reserve comments for debriefing of the instructor until after the training session or during an appropriate break in training.

**NOTE: This does not alleviate the need to include the comments in the PTRS.**

(4) Inspectors should be aware that approved training hours are measured by curriculum segments and that each hour of training normally contains a reasonable "break time" of 10 minutes.

*C. Courseware Inspection.* While observing the training, inspectors should evaluate the courseware. Inspectors should also evaluate whether or not the courseware and the instructor are effective in communicating the essential points of the lesson.

(1) *Instructor Courseware.* The inspector must observe whether or not the operator's instructor guides and lesson plans follow the approved outline. During observation, inspectors must also ensure that instructor guides and lesson plans adhere to the following criteria:

(a) Instructor courseware should be clearly titled for the appropriate curriculum segment.

(b) The instructor must be able to conduct detailed instruction for each subject area.

material (such as "responder" panels, multiple-choice questions, or in-class exercises).

(2) *Student Courseware.* The inspector must evaluate various "self-teaching" training mediums such as video tapes, audiovisual (carousel-type) slide presentations, computer-based training (CBT) presentations, programmed learning publications, and home-study materials, to ensure that they satisfy the requirements of the approved outline. Training mediums must adhere to the following standards:

(a) The information must agree with the operator's manual and other publications.

(b) The material must have sufficient detail to ensure that students comprehend the applicable subject area.

(c) The courseware should include some means of testing student assimilation of information presented.

*D. Instructional Delivery Methods.* This inspection area consists of the following inspection modules:

(1) *Training Facilities/Environment Inspection.* The inspector must ensure that the operator's training facilities and the instructional environment are conducive to learning. An inspector must ensure that the facilities meet the following standards:

- Provide adequate seating space for students
- Provide storage areas for training materials
- Provide area for instructors to prepare their lessons
- Are free of distractions, which adversely affect instructional delivery (such as exces-

individual needs of the students. The following guidelines apply to instructors and/or flight instructors. Instructors must follow these criteria where applicable.

(a) *Instructors.*

- Must know the operator's training policies and procedures, know how to complete required training forms, and must exhibit satisfactory instructional methods and techniques
- Must be knowledgeable in the specific area of instruction and must be able to present the material in a logical, clear, and organized manner
- Must be aware of the minimum equipment required for each element of training and must conform to the limitations imposed on the training element(s) by inoperative component(s)
- Should follow the applicable lesson plans, guides or other training aids to ensure that the material is properly presented as designed

(b) *Flight Instructors.*

- Must be competent in the operation of flight training devices or flight simulators and must be knowledgeable of the training elements that may be accomplished in that level of simulator or training device
- Should provide a thorough preflight briefing on all maneuvers and procedures that will be accomplished

station equipment, student responders (if applicable), and other related items.

(1) All equipment used in the training program must operate and function in good working order. Replacement parts or components (such as slide projector lamps) should be readily available.

(2) Any equipment designated to be used for "self teaching" purposes, such as CBT platforms, must have clear operating instructions readily available for student use.

(3) Systems panels, layouts, boards, or mock-ups (such as aircraft exit mock-ups) should accurately represent the designated aircraft.

*F. Flight Simulator or Training Device Inspection Module.*  
The inspector should ensure that the operator's flight simulators and flight training devices are being adequately maintained and that they effectively replicate the associated aircraft.

**NOTE: The national simulator team is responsible for conducting a flight evaluation of the training device or simulator. The inspector is responsible, however, for determining the general condition of the equipment and the operator's general ability to maintain the equipment to those same standards while training is in progress.**

*G. Testing and Checking.* In the inspection of an operator's training program, the inspector must conduct observations of the elements that involve evaluation and qualification. These elements include, but are not limited to, check airman programs and activities, training records, failure rates, and testing and checking standards. The inspector must evaluate the following modules:

**NOTE: Check airman observations (PTRS activity codes 1631, 1632, 1633, 1634) and crew/dispatcher records inspections (code 1627) are independent inspection activities. When these activities are accom-**

(2) *Training Records.* The inspector should evaluate the operator's training records for information regarding the overall effectiveness of an operator's training program. The testing and checking results available from training records are an excellent source of information for POI's to establish positive or negative trends in the operator's training program.

(3) *Oral and Practical Tests.* Inspectors should observe or conduct a number of airman certification evaluations as well as proficiency, competency, or line checks (as applicable) to determine the overall effectiveness of the operator's training programs, check airman programs, and testing and/or checking standards. Inspectors should place specific emphasis on flight events which require repetition or excessive instruction and should evaluate them according to the following criteria:

(a) Testing and checking standards must comply with the regulations, the safe operating practices, and the guidance contained in this handbook.

(b) Testing and checking standards must be consistently applied throughout the operator's training organization by its check airman and instructor personnel.

**NOTE: Testing and checking observations provide a direct measure of the effectiveness of courseware and instructional delivery methods. Inspectors should use the applicable job aids contained in this volume when observing and evaluating testing or checking in progress.**

(4) *Quality Control.* The inspector shall observe the operator's quality control program to ensure that training effectiveness is continually monitored and that specific areas or items are corrected when necessary. The opera-

H. *Inspection Results.* As a source of information about an operator's overall performance, inspectors can use the PTRS to evaluate inspections and investigations previously done on the operator. A high rate of satisfactory performance usually indicates a strong, effective training program. Repeated cases of unsatisfactory performance, however, often indicate deficiencies in an operator's training program.

(1) *Use of the PTRS.* The PTRS is an effective tool for inspectors to use during the examination and analysis of information obtained from investigative and inspection reports. Standard and ad hoc reports can be generated by the system to search for inspector comment codes which specifically relate to or, through analysis, could lead to deficient areas in an operator's training program. Both standard and ad hoc reports should be generated through PTRS by using PTRS activity codes which relate to training program activities, including check airman inspections and the results of airman certification activities. For example, the inspector could pull up a standard report (referred to as a comment code summary report), to obtain all the "U" and "P" comments submitted by inspectors during training program evaluations (PTRS activity code 1306). Inspectors should refer to the applicable PTRS user manual for both a detailed explanation of what types of reports are available and the procedures for using the system.

(2) *POI Review.* The POI shall review results of inspection reports, incident or accident reports, enforcement actions, and other relevant information about the operator's performance for indications of training effectiveness. For example, repeated reports of deficiencies, such as configuring too late, incomplete briefings, or incorrect use of the checklists may be traceable to a lack of specific training or ineffective training in a particular area.

440. - 450. RESERVED.

[PAGES 6-375 THROUGH 6-386 RESERVED]

control inspections are applicable to all Part 121 operators and Part 135 commuter operators. Separate paragraphs of this section cover inspections of dispatch systems and domestic operations, supplemental operations, Part 121 extended overwater operations, and Part 135 commuter operations. Job aids for each of these inspection elements are provided at the end of this section.

A. *Part 135 On-Demand Operators.* The inspection of the operational control function of a Part 135 on-demand operator is accomplished during a base inspection (see section 11 of this chapter for procedures and job aids). Inspectors should be familiar with the background material in volume 3, chapter 6, sections 1 and 5 of this handbook concerning dispatch, flight-following, and flight-locating, and should use these sections for reference.

B. *Inspection of Operational Control Functions at Line Stations.* An operational control inspection is conducted at the facility where the operator authorizes or releases flights. Operators commonly perform limited operational control functions at line stations, but they may not authorize or release flights at these locations. The line station portion of operational control functions is inspected during station facilities inspections (see section 19 of this chapter for procedures and job aids). Inspectors conducting station facilities inspections should be familiar with volume 3, chapter 6 of this handbook concerning dispatch, flight-following, and flight-locating, and should use it for reference.

C. *Inspection of Operators with 50 or More Aircraft.* Operational control inspections of operators having 50 or more aircraft should be accomplished by a team. The team leader shall be designated by either the POI or the GPM having responsibility for conducting the inspection according to chapter 1, section 3 of this volume.

(1) When the operational control inspection is conducted by a geographic surveillance unit (GSU), the

(2) An inspector qualified as a dispatcher according to volume 5, chapter 4 should be assigned to the team. The manager responsible for the inspection shall locate an appropriately qualified inspector with the assistance of the responsible regional flight standards division (RFSD).

**453. OBJECTIVE.** An operational control inspection has two primary objectives. The first objective is for the inspector or team to ensure that the operator is in compliance with the minimum requirements of the FAR's and the operations specifications (OpSpecs). The second objective is for the inspector or team to ensure that the operator's system of control provides positive assurance of public safety. The operator must meet both objectives to obtain and retain an operating certificate under FAR 121.27(a)(2) or FAR 135.13(a)(2). To make this determination, the inspector or team must evaluate the operator to ensure that the following criteria are met:

- Responsibility for operational control is clearly defined
- An adequate number of operational control personnel are provided
- Applicable manuals contain adequate policy and guidance to allow operational control personnel and flightcrews to carry out their duties efficiently, effectively, and with a high degree of safety
- Operational control personnel are adequately trained, knowledgeable, and competent in the performance of their duties
- Flight control personnel and flightcrews have been provided with the necessary information for the safe planning, control, and conduct of all flights
- The operator provides adequate facilities

**455. PRACTICES AND PROCEDURES.** Inspectors conduct operational control inspections through systematic manual reviews, records inspections, observations, and interviews.

A. *Inspector Preparation and Manual Review.* Before starting an operational control inspection, the inspector should become thoroughly familiar with the sections of volume 3, chapter 6 of this handbook that are applicable to the operator. Inspectors must then become familiar with the operational control sections of the operator's general operations manual (GOM). This manual review is both the first step in the inspection process and preparation for subsequent steps. The job aids for the various aspects of the inspection contain the topics which should be included in the operator's manuals. Inspectors should use the job aids located at the end of this section to determine if the necessary topics are covered and volume 3, chapter 6 to determine if the contents of the operator's manual are acceptable.

B. *Records Checks, Interviews, and Observations.* The inspector should establish with the operator a mutually

personnel from their duties and responsibilities. To prevent intruding into actual operations, the inspector should, if possible, conduct these interviews privately and away from the flight control center.

(2) Inspectors must observe actual flight-release operations. Before beginning these observations, an inspector should request a tour of the operator's facility for orientation, during which the inspector should observe a number of different people at work. The inspector should ask questions; however, care must be taken not to distract or interfere with the individuals in the performance of their assigned duties. An effort should be made by the inspector to make observations during periods of peak activity, adverse weather, or during nonroutine operations. POI's of large operators should arrange to have these observations conducted at random times throughout the year, preferably in periods of inclement weather.

(3) Inspectors should observe competency checks being conducted to evaluate the knowledge level of dispatchers and the performance of the supervisor.

**456. - 466. RESERVED.**



*A. Authorized Operations.*

- (1) Are the operations that may and may not be conducted according to the OpSpecs (including areas of operation) clearly specified?
- (2) Are there clear definitions of domestic, flag, and supplemental operations? Are there clear definitions of the rules under which each of these operations is conducted?
- (3) Are the applicable FAR's identified and the operator's policies applicable to each type of operation clearly stated?

*B. Manuals.*

- (1) Is there a section of the GOM in which the policy and guidance for operational control been collected for the guidance of flightcrews and dispatchers?
- (2) Are the topics listed on this job aid adequately covered?
- (3) Is the applicable section of the GOM readily available to dispatchers and flightcrews while they perform their duties?
- (4) Is the copy of the operator's GOM that is available to dispatchers or flightcrews current?

*C. Original Release.*

- (1) Are the conditions clearly stated under which a flight may and may not be dispatched?
- (2) Are the conditions stated under which a flight must be re-routed, delayed, or cancelled?
- (3) Does the flight release contain all the required elements?
- (4) Are limitations required in the remarks of the release?
- (5) Is a written copy of weather reports and forecasts (including PIREP's) and NOTAM's attached to the release and provided to the flightcrew?

*D. Responsibility for Pre-departure Functions.*

- (1) Are the responsibility and procedures for accomplishing the following functions clearly specified?
  - Crew assignment

- Release of the aircraft from maintenance
- Control of MEL and CDL limitations
- Weight and balance

(2) Have adequate procedures for cross-checking and verifying these activities been established?

(3) Is each of these procedures effective?

(4) What means has the operator established for the PIC and dispatcher to ensure that each of these functions has been satisfactorily accomplished before the aircraft departs?

*E. Dispatcher Briefing.*

(1) How do the operator's procedures provide for briefing of the PIC by the dispatcher?

(2) Is the minimum content of the briefing specified and adequate?

*F. Dual Responsibility.*

(1) How are the signatures of both the PIC and the dispatcher on the dispatch release accomplished?

(2) Is the PIC's obligation to operate the flight according to the release, or to obtain an amended release, clearly stated?

*G. Flight-Following.*

(1) Are the dispatcher's flight-following requirements and procedures clearly stated?

(2) Is policy and guidance provided to flightcrews and dispatchers for monitoring fuel en route?

(3) Are flightcrew reporting requirements and procedures clearly stated?

(4) Are there specified procedures for dispatchers to follow when a required report is not received?

(5) Is a record of communications made and retained?

*H. Inability to Proceed as Released.*

(1) Is a policy stated concerning the PIC's latitude to deviate from a dispatch release without obtaining a new release?

I. *Weather.*

- (1) Does the operator obtain weather reports from an approved source?
- (2) Are forecasts based on approved weather reports?
- (3) Does the operator have an EWINS? Are procedures for making flight movement forecasts clearly specified? Are those individuals authorized to make a flight movement forecast clearly specified? Are other individuals specifically prohibited from making flight movement forecasts?
- (4) Does the operator have an adverse weather system?
- (5) Does the operator have adequate procedures for providing the latest available weather reports and forecasts to flightcrews while the flight is en route?
- (6) Does the operator have adequate procedures for updating weather information when the aircraft is delayed on the ground?

J. *Weather Minimums.*

- (1) Is release under VFR authorized by paragraph B33(d) of the OpSpecs?
  - (2) If so, has the forecast and actual weather allowed VFR flight to destination on those flights so released?
  - (3) Have turbojet aircraft been released under VFR?
  - (4) What IFR departure minimums are authorized by paragraph C56 of the OpSpecs?
  - (5) When flights are released with the departure airport below landing minimums, are takeoff alternates named on the dispatch release?
  - (6) What destination weather minimums are authorized by paragraph C53?
  - (7) What weather minimums are authorized by paragraph C57 for "high minimums" captains?
  - (8) How does the operator ensure compliance with paragraph C54(b) of the OpSpecs (operable centerline lighting and 15% additional runway for turbojet operations for operations below 300 and 3/4)?
  - (9) When a flight is released to a destination below CAT I minimums, is that airplane type authorized at CAT II or CAT III operations at that location according to paragraph C59 or C60 of the OpSpecs?
  - (10) When destination alternates are required, are they named on the dispatch release?
-

(14) How does the operator ensure that dispatchers are aware of these limitations before dispatching a flight?

(15) Do weather forecasts from the trip records show that these limits have been complied with for dispatch?

**K. *Selection of Alternates.***

(1) Is policy, direction, and guidance provided for the selection of alternates?

(2) Is terrain and engine-out performance considered in the alternate selection?

**L. *NOTAM's.***

(1) Is the required NOTAM information provided (Class I, Class II, Local, and FDC)?

**M. *Information.***

(1) What provisions does the operator make for supplying airport and navigation information?

(2) What means does the operator use to comply with the requirement for an airport data system? Is it adequate?

(3) Are flightcrews provided with written flightplans for monitoring flight progress and fuel burn?

(4) How does the operator provide data to dispatchers on takeoff and landing minimums at each airport?

(5) Do dispatchers have immediate access to such data?

(6) Are provisions made for nonstandard operations, such as inoperative centerline lighting?

**N. *Fuel.***

(1) Are all the required increments of fuel provided (start and taxi, takeoff to arrival at destination, approach and landing, missed approach, alternate fuel, 45 minutes of reserve, and contingency fuel)?

(2) Are the operator's policies concerning contingency fuel adequate for the environment in which operations are conducted?

(3) Are there minimum fuel procedures specified for both dispatchers and PIC's?

(4) When aircraft are dispatched without an alternate, is adequate contingency fuel carried for unforecast winds, terminal area delays, runway closures, and contingencies?

- Crash
- Overdue or missing aircraft
- Bomb threat
- Hijacking

*P. Changeover Procedures.*

(1) Is an adequate overlap provided for the dispatcher being released to brief the oncoming dispatcher on the situation?

*Q. Trip Records.*

- (1) Are the required trip records carried to destination?
- (2) Are trip records retained for 30 days?

**II. DISPATCHERS AND METEOROLOGISTS.**

*A. Qualification.*

- (1) Are all dispatchers certified?
- (2) Have all dispatchers successfully completed a competency check within the eligibility period?
- (3) Have all dispatchers completed route familiarization within the preceding 12 calendar months?
- (4) How does the operator ensure that dispatchers are currently familiar with the areas in which they work?
- (5) How are meteorologists qualified?

*B. Knowledge of Weather.*

- (1) Are dispatchers knowledgeable about the following weather conditions?
  - Surface (fronts, fog, low ceilings, etc.)
  - Upper Air (tropopause, jet streams)
  - Turbulence (pressure and temperature gradients)

- (4) Can dispatchers read upper-air charts and interpret the meanings?

*C. Knowledge of the Area.*

- (1) Do dispatchers immediately recognize the airport identifiers for the airports in the area in which they are working?
- (2) Are dispatchers generally familiar with the airports in the area in which they are working (number and length of runways, available approaches, general location, elevation, surface temperature limitations)?
- (3) Are dispatchers aware of which airports, in the areas in which they are working, are special airports, and why?
- (4) Are dispatchers aware of the terrain surrounding the airports in the areas in which they are working?
- (5) Are dispatchers aware of dominant weather patterns and seasonal variations of weather in the area?
- (6) Are dispatchers aware of route segments limited by drift-down?

*D. Knowledge of Aircraft and Flight Planning.*

- (1) Are dispatchers aware of the general performance characteristics of each airplane with which they are working (such as average hourly fuel burn, holding fuel, engine-out, drift-down height, effect of an additional 50 knots of wind, effect of a 4,000-foot lower altitude, crosswind limits, maximum takeoff and landing weights, required runway lengths)?
- (2) Can dispatchers read and explain all the items on the operator's flightplan?

*E. Knowledge of Policy.*

- (1) Are dispatchers knowledgeable of the OpSpecs, particularly such items as authorized minimums?
- (2) Are dispatchers aware of the policies and provisions of the operator's manual as discussed under policies and procedures?

*F. Knowledge of Responsibilities.*

- (1) Are dispatchers knowledgeable of their responsibilities under the FAR's (such as briefing PIC; cancelling, rescheduling, or diverting for safety; in-flight monitoring; in-flight notification of PIC)?
- (2) Are dispatchers knowledgeable of their responsibilities under the operator's manual as discussed in paragraph A?
- (3) Are dispatchers aware of their obligation to declare emergencies?
-

**H. Duty Time.**

- (1) Are the regulatory duty time requirements being complied with?

**III. SUPERVISORS.**

- A. *Qualification.* Are supervisors qualified and current as dispatchers?

- B. *Conduct of Checks.* Are competency checks appropriate, thorough, and rigorous?

**IV. FACILITIES AND STAFF.**

A. *Physical.*

- (1) Is enough space provided for the number of people working in the dispatch center?
- (2) Are the temperature, lighting, and noise levels conducive to effective human performance?
- (3) Is the access to the facility controlled?

B. *Information.*

- (1) Are dispatchers supplied with all the information they require (such as flight status, maintenance status, load, weather, facilities)?
- (2) Is the information effectively disseminated and displayed? Can information be quickly and accurately located without overloading the dispatcher?
- (3) Are real-time weather displays available for adverse weather avoidance?

C. *Communications.*

- (1) Can a dispatcher establish rapid and reliable radio communications (voice or ACARS) with a captain when a flight is parked at the gate?
- (2) How much time does it take to deliver a message to an en route flight and get a response?
- (3) Are direct-voice radio communications available at all locations? Are they reliable? If communications facilities are shared with other airlines, does traffic congestion preclude rapid contact with a flight?
- (4) If hub-and-spoke operations are conducted, are there adequate communication facilities available to contact and deliver a message to all arriving flights within a 15-minute period?

(2) Have procedures been established for coordinating with central flow control?

(3) Have adequate internal communications links been established?

E. *Workload.*

(1) What method does the operator use to show compliance with the requirement to assign enough dispatchers during periods of normal operations and periods of nonroutine operations?

(2) Are the operator's methods adequate?

(3) Do dispatchers have enough time to perform both dispatch and flight-following duties in a reasonable manner?



(1) Are the operations that may and may not be conducted according to the OpSpecs, including areas of operation, clearly specified?

*B. Manuals.*

(1) Is there a section of the GOM in which the policy and guidance for operational control has been collected for the guidance of flightcrews and flight-followers?

(2) Are the topics listed on this job aid adequately covered?

(3) Is the applicable section of the GOM readily available to flight-followers and flightcrews while they perform their duties?

(4) Is the operator's GOM current?

*C. Original Release.*

(1) Are the conditions clearly stated under which a flight may and may not be released?

(2) Are the conditions stated under which a flight must be re-routed, delayed, or cancelled?

(3) Does the flight release contain all of the required elements?

(4) Are limitations placed in the remarks?

(5) What provisions are made for PIC's and flight-followers to obtain weather reports and forecasts (including PIREP's and NOTAM's)?

*D. Responsibility for Pre-departure Functions.*

(1) Are the responsibilities and procedures clearly specified for accomplishing the following functions?

- Crew assignment
  - Load planning
  - Aircraft routing
  - Flight planning
  - Release of the aircraft from maintenance
  - Control of MEL and CDL limitations
-

(4) What means has the operator established for the PIC and flight-follower to ensure that each of these functions has been accomplished satisfactorily before the aircraft departs?

*E. Dual Responsibility.*

(1) How is the concurrence of the flight-follower obtained before the PIC signs the release?

(2) Is the PIC's obligation to operate the flight according to the release or to obtain concurrence of the flight-follower for an amended release clearly stated?

*F. Flight-Following.*

(1) Are the flight-follower's duties and procedures clearly stated?

(2) Is policy and guidance provided to flight-followers for monitoring flight movements?

(3) Are flight-following procedures effective?

*G. Inability to Proceed as Released.*

(1) Is a policy stated concerning the PIC's latitude to deviate from the flight release without obtaining a new release?

(2) Is there specific and adequate direction and guidance to PIC's and flight-followers for the actions to take when a flight cannot be completed as planned (such as destinations or alternates below minimums, runways closed or restricted)?

(3) Are procedures to follow specifically and clearly stated in case of a diversion or holding?

*H. Weather.*

(1) Does the operator obtain weather reports from an approved source?

(2) Are forecasts based on approved weather reports?

(3) Does the operator have an EWINS? Are procedures for making flight-movement forecasts clearly specified? Is the privilege of making a flight movement forecast limited to meteorologists and specifically trained dispatchers? Are other individuals specifically prohibited from making flight-movement forecasts? As part of the requirements for an EWINS, does the flight-follower have the capability to contact flights while they are en route?

(4) Does the operator have an adverse weather system?

(5) Does the operator have adequate procedures for the flightcrews to obtain the latest available weather report while the flight is en route?

- (2) If so, have the forecast and actual weather report allowed VFR flight to proceed to destination on those flights so released?
- (3) Have turbojet aircraft been released under VFR?
- (4) What IFR departure minimums are authorized by paragraph C56 of the OpSpecs?
- (5) When flights are released with the departure airport below landing minimums, are takeoff alternates named on the flight release?
- (6) What destination weather minimums are authorized by paragraph C53?
- (7) What weather minimums are authorized by paragraph C57 for "high minimums" captains?
- (8) How does the operator ensure compliance with paragraph C54(b) of the OpSpecs (operable centerline lighting and 15% additional runway for turbojet operations for operations below 300 and 3/4)?
- (9) When a flight is released to a destination below CAT I minimums, is that airplane type authorized for CAT II or CAT III operations at that location, according to paragraph C59 or paragraph C60 of the OpSpecs?
- (10) When destination alternates are required, are they named on the flight release?
- (11) Is the weather at the named alternate airport equal to or better than that required by paragraph C55 of the OpSpecs?
- (12) Is "marginal" defined for the designation of two alternates on the dispatch release?
- (13) Are two alternates designated when required?
- (14) How does the operator ensure that flight-followers are aware of these limitations before concurring with the release of a flight?
- (15) Do weather forecasts from the trip records show that these limits have been complied with for dispatch?

*J. Selection of Alternates.*

- (1) Are policy, direction, and guidance provided for the selection of alternates?
- (2) Are terrain and engine-out performance considered in alternate selection?
- (3) Is an alternate airport always designated?

- (1) What provisions does the operator make for supplying airport and navigation information?
- (2) What means does the operator use to comply with the requirement for an airport data system? Is it adequate?
- (3) Are flightcrews provided with written flightplans for monitoring flight progress and fuel burn?
- (4) How does the operator provide data to flight-followers on takeoff and landing minimums at each airport?
- (5) Do flight-followers have immediate access to such data?
- (6) Are provisions made for nonstandard operations such as inoperative centerline lighting?

**M. *Fuel.***

- (1) Are all of the required increments of fuel provided (such as start and taxi, takeoff to arrival at destination, approach and landing, missed approach, alternate fuel, 30 minutes of reserve, and contingency fuel)?
- (2) Are there minimum fuel procedures specified for both dispatchers and PIC's?
- (3) Are the operator's policies concerning contingency fuel adequate for the environment in which operations are conducted?

**N. *Emergency Procedures.***

- (1) Are emergency action procedures and checklists published and readily available?
  - In-flight Emergency
  - Crash
  - Overdue or missing aircraft
  - Bomb threat
  - Hijacking

**O. *Changeover Procedures.***

- (1) Is an adequate overlap provided for the flight- follower being released to brief the oncoming flight-follower on the situation?

**P. *Trip Records.***

---

A. *Qualification.*

- (1) What means does the operator use to comply with the requirement that flight-followers are competent? Is the operator's method effective?
- (2) How does the operator ensure that flight-followers are currently familiar with the areas in which they work?
- (3) How are meteorologists qualified?

B. *Knowledge of Weather.*

- (1) Are flight-followers knowledgeable of the following weather conditions?
  - Surface (fronts, fog, low ceilings)
  - Upper Air (tropopause, jet streams)
  - Turbulence (pressure and temperature gradients)
  - Severe (low-level windshear, microburst, icing, thunderstorms)
- (2) Can flight-followers read a terminal report, forecast accurately, and interpret the meanings?
- (3) Can flight-followers read various weather depiction charts and interpret the meanings?
- (4) Can flight-followers read upper-air charts and interpret the meanings?

C. *Knowledge of the Area.*

- (1) Do flight-followers immediately recognize the airport identifiers for the airports in the area in which they are working?
  - (2) Are flight-followers generally familiar with the airports in the area in which they are working (number and length of runways, available approaches, general location, elevation, surface temperature limitations)?
  - (3) Are flight-followers aware of which airports, in the areas in which they are working, are special airports and why?
  - (4) Are flight-followers aware of the terrain surrounding the airports in the areas in which they are working?
  - (5) Are flight-followers aware of dominant weather patterns and seasonal variations of weather in the area?
  - (6) Are flight-followers aware of route segments limited by drift-down?
-

- (2) Can flight-followers read and explain all the items on the operator's flight plan?

*E. Knowledge of Policy.*

- (1) Are flight-followers knowledgeable of the OpSpecs, particularly authorized minimums?

- (2) Are flight-followers aware of the policies and provisions of the operator's manual as discussed under policies and procedures?

*F. Knowledge of Responsibilities.*

- (1) Are flight-followers knowledgeable of their responsibilities under the FAR's?

- (2) Are flight-followers knowledgeable of their responsibilities under the operator's manual as discussed in paragraph A?

*G. Proficiency.*

- (1) Are flight-followers competent in the performance of their assigned duties?

- (2) Are flight-followers alert for potential hazards?

**III. FACILITIES AND STAFF.**

*A. Physical.*

- (1) Is enough space provided for the number of people working in the flight-following center?

- (2) Are the temperature, lighting, and noise levels conducive to effective human performance?

- (3) Is access to the facilities controlled?

*B. Information.*

- (1) Are flight-followers supplied with all the information they require (flight status, maintenance status, load, weather, facilities)?

- (2) Is information effectively disseminated and displayed? Can information be quickly and accurately located without overloading the flight-follower?

- (3) Are real-time weather displays available for adverse weather avoidance?

*C. Communications.* Can a flight-follower establish reliable communications with a PIC before release?

---

(3) Have adequate internal communications links been established?

E. *Workload.*

(1) What methods does the operator use to show compliance with the requirement to assign enough flight-followers during periods of normal operations and periods of nonroutine operations? Are the operator's methods adequate?

(2) Do flight-followers have enough time to perform both release and flight-following duties in a reasonable manner?

(1) Are the areas clearly specified in the GOM in which extended range operations may be conducted according to the OpSpecs?

**B. Manuals.**

(1) Is there a section of the GOM that contains the policy and guidance for extended overwater operations?

(2) Are the topics listed on this job aid adequately covered?

(3) Is the applicable section of the GOM readily available to flight-followers and flightcrews while they perform their duties?

(4) Is the operator's GOM current?

**C. Original Release.**

(1) Are the conditions under which a flight may and may not be released in extended overwater operations clearly stated?

(2) Does paragraph B33(d) of the OpSpecs allow dispatch under VFR conditions? Are all extended overwater operations conducted under IFR?

(3) Are the conditions under which a flight must be re-routed, delayed, or cancelled clearly stated?

(4) Are the destinations listed in paragraph B50 of the OpSpecs to which a flight may be dispatched when there are no alternates?

(5) Are alternates listed for all flights conducted under supplemental rules regardless of the weather?

(6) Are alternates designated for all flag flights of 6 or more hours?

(7) Have flights been released on flag flights of less than 6 hours without a destination alternate when an alternate was required?

(8) Do weather forecasts from the trip records show that the limits and alternate weather minimums have been complied with for dispatch?

**D. Fuel.**

(1) Are all the required increments of fuel provided (such as start & taxi, takeoff to arrival at destination, approach and landing, en route reserve, missed approach, alternate fuel, 30 minutes of reserve, and contingency fuel)?



are conducted:

*E. Release with Special Fuel Reserves.*

(1) Is the operator authorized special fuel reserves by paragraph B43 of the OpSpecs? Do all flights released under this paragraph have the required increments of fuel? Are the increments correctly computed (en route reserve and holding fuel)? Is adequate contingency fuel carried?

*F. Planned Re-release.*

(1) Does the operator conduct planned re-release according to paragraph B44 of the OpSpecs?

(2) Is the re-release point common to both routes?

(3) Is there a separate operational analysis for the two routes prepared, and are they provided to the PIC and the dispatcher or flight-follower?

(4) Is there fuel planning according to paragraph B44 in the OpSpecs?

(5) Are there re-release messages transmitted, acknowledged, and recorded? Does the re-release message satisfy all requirements, including NOTAM and weather information?

(6) Does the aircraft meet landing performance requirements at the intermediate destination?

*G. Engine-Out Performance.*

(1) How does the operator comply with single-engine-out and 2-engine-out performance rules?

(2) Is the operator's analysis accurate and complete?

(3) Does the operator provide the PIC and dispatcher or flight-follower with multiple ETP's when required?

(4) Is guidance provided for the use of single-engine and 2-engine ETP's?

(5) Does the GOM provide adequate guidance for drift-down or determination of fuel dump requirements?

*H. NOTAM's.* Are OMEGA and LORAN NOTAM's provided when applicable?

*I. Information.* How are track messages provided and checked against flightplans?

*J. MNPS Procedures.* Does the GOM contain information and procedures for navigation in MNPS airspace?

(2) How does the operator ensure that dispatchers and flight-followers are currently familiar with the areas in which they work? Are dispatchers given en route familiarization in extended overwater operations?

*B. Knowledge of Extended Range Operations.*

(1) Are dispatchers and flight-followers knowledgeable in the performance characteristics of each airplane with respect to overwater considerations (such as average hourly fuel burn, engine-out, drift-down height, engine-out cruise performance, effect of an additional 50 knots of wind on ETP's, effect of a 4,000-foot lower altitude, relationship of single-engine and 2-engine ETP's)?

*C. Knowledge of the Area.*

(1) Do dispatchers or flight-followers immediately recognize the airport identifiers for the airports in the area in which they are working?

(2) Are dispatchers or flight-followers generally familiar with the airports in the area in which they are working (number and length of runways, available approaches, general location, elevation, surface temperature limitations)?

(3) Are dispatchers or flight-followers aware of which airports are special airports in the areas in which they are working, and why?

(4) Are dispatchers or flight-followers aware of dominant weather patterns and seasonal variations of weather in the area (such as monsoons and jet streams)?

(5) Are dispatchers or flight-followers aware of route segments limited by drift-down, engine-out performance, or depressurization considerations?

(6) Are dispatchers and flight-followers aware of the available en route alternates and the characteristics of these airports?

*D. Knowledge of Special Fuel Reserves and Planned Re-release.*

(1) When special fuel reserves or planned re-releases are authorized, are dispatchers and flight-followers thoroughly versed in these procedures and requirements?

---

[PAGES 6-407 THROUGH 6-416 RESERVED]

operators, supplemental operators, and Part 135 commuter operators. Base inspections are conducted on Part 135 on-demand operators (see section 11 of this volume).

A. *Location.* A station facilities inspection is conducted at every location at which a Part 121 operator or Part 135 commuter operator initiates and recovers flights. A station facilities inspection encompasses both operations and facilities.

**NOTE: This inspection is recorded under Program Tracking and Reporting Subsystem (PTRS) code 1635. Air operator facilities inspections and PTRS codes 1615, 1616, 1617, and 1618 do not apply to station facilities inspections.**

B. *Inspection Areas.* Nine inspection areas have been identified as areas for inspectors to observe and evaluate during a station facilities inspection. These inspection areas are defined as follows:

(1) *Personnel.* This area refers to the personnel employed at the facility. Inspectors must evaluate the adequacy of staffing levels and the competency of assigned personnel in the performance of their duties.

(2) *Manuals.* This area refers to the availability, currency, and content of the written guidance required by employees in the performance of their assigned duties.

(3) *Records.* This area refers to those records that the operator is required to maintain relative to station activities. For example, operators are required to record hazardous material training for operations personnel. This area does not include those records inspected during a "records inspection."

(4) *Training.* This area refers to the adequacy of the

operator's physical training required to support flight operations, such as ramp areas, blast fences, signs, signaling devices, lighting, passenger- and cargo-loading equipment, aircraft servicing, and towing equipment.

(6) *Conformance.* This area refers to the operator's employees' compliance with the operator's procedures and the FAR's.

(7) *Flight Control.* This area refers to the control and support of aircraft flight operations.

(8) *Servicing.* This area refers to the operator's procedures and standards required for the safe servicing and handling of its aircraft.

(9) *Management.* This area refers to the effectiveness of the operator's management and supervisory personnel.

**469. MANAGEMENT OF STATION FACILITIES INSPECTIONS.** Geographic program managers (GPM's) are responsible for planning and coordinating inspections of flag, domestic, supplemental, and commuter operator stations in their areas of responsibility. GPM's shall ensure that station facilities inspections are planned as "P" items in the annual work program for each station in the unit's area of responsibility. When an operator establishes a new station, the principal operations inspector (POI) and the GPM must coordinate the inspection plan before the inspection is conducted. The GPM is responsible for conducting the inspection; however, the POI may decide to include one or more inspectors on the team to ensure that appropriate guidance is available, and for standardization purposes.

**NOTE: GPM's do not have to plan station facilities inspections of Part 121 operators or Part 135 commuter operators that contract to use facilities within the geographic area for a single flight or a short series of flights.**

specific area of interest. Inspectors should use the direction, guidance, and procedures that follow when conducting a station facilities inspection.

**NOTE: The direction and guidance of this and the following paragraphs is general in nature. Not all of it may be appropriate in any given situation.**

A. *Planning for the Inspection.* The inspector should carefully plan a station facilities inspection before conducting it. The inspector should review previous inspection reports, identify any areas of weakness previously reported, and review the corrective actions that were taken. GPM's should contact the appropriate POI to determine if there are any specific areas that may currently need inspection. The inspector should coordinate with the station manager ahead of time to establish a date and time for conducting the inspection.

B. *Briefing for the Inspection.* Before beginning the inspection, the inspector should request that the station manager provide a briefing on the facility operation, including its assigned personnel and operational procedures. In turn, the inspector should brief the station manager and the staff on the purpose and scope of the inspection. This discussion should include the following points:

- Purpose of the facility inspection
- Introduction of inspectors
- The specific areas to be inspected
- Inspection authority (FAR 121.81 or FAR 135.73)
- The proposed time and place of the exit briefing

C. *Preliminary Tour.* The actual inspection should begin with a tour of the facility. The tour should provide the

**473. SPECIFIC INSPECTION PRACTICES AND PROCEDURES.** Inspectors should use the Station Facilities Inspection Job Aid (figure 6.2.19.1. TBD) during the inspection. This job aid provides inspectors with "reminder" items to check when they evaluate specific areas. It also includes the applicable PTRS key word listing and codes to facilitate the writing of the inspection report. There may be areas inspected which are not included in the job aid. An area such as these should be recorded as an "other" item in the respective subject area. There also may be items on the job aid which are not observed and should, therefore, be left blank. The job aid is designed solely as a reminder and as a means of standardization to ensure that station facilities inspections are conducted in the same general manner. Inspectors should conduct station facilities inspections by using the procedures that follow.

A. *Personnel.* The inspector should review the staffing of the facility. During this review, the inspector should attempt to determine whether or not the station is adequately staffed and whether or not assigned personnel are competent in their duties. The inspector may accomplish this by observing individuals as they perform their assigned job tasks. For example, the inspector may review recently completed forms for accuracy and may interview personnel, while being careful to avoid interfering with their duties.

B. *Manuals.* The inspector should review the operator's manual or system of manuals for the operation of the facility to determine whether or not the manuals are on hand, current, readily available to personnel, and adequate in content. Direction and guidance for conducting a manuals inspection is contained in section 6 of this volume.

(1) *On-Hand Requirements.* Inspectors should determine what manuals the operator requires its station personnel to maintain and then determine whether or not these manuals are on hand. As a result of the inspection, the inspector should be able to conclude that either these

(3) *Content Requirements.* Each manual or publication should be checked by the inspector to ensure that it includes that information and guidance necessary to allow personnel to perform their duties and responsibilities effectively and safely. Inspectors should refer to paragraph 1163 of this volume for information on manuals relevant to station operations. Depending on the scope of operations conducted at the station, direction and guidance may be required in the following operational areas:

- Refueling procedures
- Aircraft towing or movement requirements/procedures
- Weight and balance manual/procedures
- Operation of ground service equipment/procedures
- Aircraft flight manual (AFM) for types of regularly scheduled aircraft
- Personnel training manual
- Current emergency telephone listing
- Accident/incident telephone listing
- Security training and procedures
- Severe weather notification procedures
- Carry-on baggage procedures
- Identification or handling of hazardous materials/procedures
- Instructions and procedures for notification

C. *Records.* Available records relative to station operations should be inspected, such as communications records and station personnel training records. (Inspection of crew and dispatcher training records and flight and rest records is a separate inspection activity.) Specific guidance for conducting duty-time inspections will be developed in a forthcoming section of this chapter; guidance for conducting trip records inspections is in section 20. In a small facility, a records inspection and a facility inspection could be conducted on the same day. In most facilities, however, records inspections and facilities inspections should be planned and conducted separately.

D. *Training.* The inspector should review the training conducted for the various classifications of station personnel. The regulations do not specify training requirements either by subject or frequency for station personnel, yet these personnel should receive both initial and recurrent training in assigned job functions. This training may be either formal classroom training or on-the-job training. Specific areas of training include the following:

- Duties and responsibilities
- Hazardous materials
- Passenger handling and protection
- Load planning and weight and balance procedures
- Communications procedures
- Manual backup procedures in case of computer or communications equipment failures
- Aircraft servicing and ramp operations
- First aid and emergency actions

ramp surfaces. Adequate equipment must be available for snow removal.

(2) *Passenger Safety.* Employees and passengers must be protected from jet or prop blast. If a jetway is unavailable or not used, inspectors should evaluate passenger-handling procedures and facilities and give particular attention to the movement of passengers across ramps. The operator must have established procedures for assisting handicapped passengers, especially when boarding ramps are not used.

(3) *Night Operations.* To ensure that adequate lighting is available and is being used for safe ground operations, inspectors should conduct observations during night operations, if feasible.

(4) *Station Manager Responsibilities.* The operator's management usually assigns station managers with the responsibility for maintaining surveillance of the airport and for reporting airport hazards and any new obstructions. Inspectors should determine what responsibilities have been assigned to the station manager and how those responsibilities are being discharged.

(5) *Airport Deficiencies.* Inspectors are not tasked with conducting a physical inspection of the airport during a station facilities inspection; however, any airport deficiencies observed during a station facilities inspection must be noted by inspectors and must be recorded for transmittal to the regional airports division.

F. *Conformance.* In each area to be inspected, inspectors should evaluate the operator's procedures for compliance with provisions of the applicable FAR's. In addition, the operator's employees must comply with the operator's directives as provided for in the operator's manuals.

G. *Flight Control.* The inspection of a station's flight control function should be conducted while actual arrival

(1) *Operational Control Inspection.* When a dispatch or flight-following center is located within the station, an operational control inspection should be conducted in conjunction with the station facilities inspection. Unless the station is small, these two inspections should be planned and conducted as separate events.

(2) *Line Station Functions.* Operators often exercise operational control from a central location and assign the line stations with related support functions, such as delivering dispatch releases and flightplans to the flightcrew. In this situation, inspectors should determine which functions are the responsibility of the station. Inspectors should evaluate station personnel in the performance of these functions. Inspectors should also evaluate the effectiveness of the division of responsibility between the central operational control center and the line station.

(3) *Load Planning.* Inspectors should determine who is assigned responsibility for load planning and weight and balance control. Passenger and cargo weights must be accurate and reliably obtained, collected, and transmitted. Personnel must be adequately trained. Procedures should be simple and effective. When computerized systems are used, there must be adequate backup provisions for computer failure. When station personnel are required to perform manual calculations in case of computer failure, the operator must ensure continued proficiency of personnel in making these calculations. Inspectors should ask these individuals to perform a manual calculation and compare the individual's solution to the computer solution.

(4) *Weather Information.* Inspectors should determine the approved source of weather for the station. If weather information is provided by a supplementary aviation weather reporting station (SAWRS), the SAWRS co-operator should be evaluated. FAA Form 8430-22, "Supplementary Aviation Weather Reporting Station (SAWRS) Questionnaire" is the questionnaire used to evaluate the supplementary weather information to ensure that the

believe to be maintenance discrepancies, they are not assigned to inspect the maintenance activities. The preferred procedure is for station facilities inspections to be conducted by a joint operations/airworthiness team. Inspectors should evaluate areas of concern to operations personnel, such as the manner in which logbooks are handled and how MEL/CDL provisions are complied with. The inspector should observe and verify safe practices in the operator's service operations and that adequate personnel are available for the required aircraft servicing. Operations to be observed should include, but are not limited to, the following:

- Fueling (ensuring that proper procedures are being followed)
- Deicing (ensuring that the correct ratio and temperature of the glycol/water mix is being used and that all snow and ice is removed)
- Marshalling (ensuring safe operation and correct procedures) See Advisory Circular (AC) 00-34, "Aircraft Ground Handling and Servicing."
- Chocks/Mooring (ensuring chocks are in place, the parking ramp is relatively level, and brakes are set or released)

I. *Management.* Throughout the inspection, inspectors should observe managers and supervisors and evaluate the organizational structure, particularly the effectiveness of vertical and horizontal communications. Managers and

training is provided to contractor personnel.

(2) *Contingency Plans.* The station management should be prepared for contingencies. Action plans should be available for use in case of such events as accidents, injury, illness, fuel spills, bomb threats, hijacking, severe weather, and hazardous material spills. Station personnel should know the location of these plans. Plans should contain emergency notification checklists and procedures for suspending or cancelling operations. Emergency telephone listings should be posted in obvious locations and be clearly legible.

#### **475. STATION FACILITIES INSPECTION REPORT.**

Inspectors should use the Station Facilities Inspection Job Aid (figure 6.2.19.1. TBD) when recording the inspection in the PTRS and for updating the Vital Information Subsystem (VIS) environmental file. Station facilities inspections for Part 121 operators and Part 135 commuter operators are recorded under PTRS code 1635. Codes 1615, 1616, 1617, and 1618 are no longer used for these operators. Discrepancies observed during the inspection should be documented in the comment section along with any on-the-spot corrective action taken by the operator. Any recommended corrective actions should also be noted on the report so that the POI will have the inspector's views concerning the most effective means of resolving the discrepancies. When applicable, the inspector should indicate an outstanding or above-average station facility on the report to provide an accurate picture of the operator's operations at that particular facility.

**476. - 486. RESERVED.**

---

[PAGES 6-423 THROUGH 6-434 RESERVED]



release, or a pilot route certification. The inspector's objective in trip records surveillance is to determine that the disposition of information used by flight crewmembers and dispatchers in revenue service is accurate. Additionally, it must meet the following criteria:

- Be complete in content
- Be stored in a manner that allows easy retrieval
- Be retained for the required time period
- Be in compliance with the procedures in the operations manual

**489. APPLICABLE REGULATIONS.** The requirement to maintain copies of trip records is found in FAR 121.695 for Part 121 domestic and flag carriers, FAR 121.697 for Part 121 supplemental air carriers and commercial operators. FAR's 135.63(c) and (d) identify what records must be kept and the disposition period for Part 135 operators.

**491. LOCATION AND DISPOSITION.** The physical location of operator trip records must provide easy accessibility for inspection during the required retention period. Company policy, as stated in the general operations manual (GOM), should identify the physical location of these records and how these records will be maintained.

*A. Domestic and Flag Operators.* The trip records for these operators are required to be retained for at least 3 months. Normally, trip records are kept at the departure facility; however, copies may be physically retained at other locations: at the principal base of operations, at the departure stations in total, or at any acceptable combination of these. Trip records for these operators include the following:

*B. Supplemental Air Carriers and Commercial Operators.* These operators are required to retain the trip records for 3 months at the principal operations base. If a flight departs from a point other than the main operations base, the copies of the trip records shall be mailed, for retention, to the principal operations base. If the person who manages that departure point does not depart on that flight, then the records may be retained at that departure point. The following records may be kept for 30 days before being transferred to the principal base unless the originals or other copies have been previously returned to the base:

- Load manifests
- Flight releases
- Airworthiness releases
- Flightplans
- Pilot route certifications

*C. FAR 135 Operators.* Operators using multiengine aircraft must prepare a load manifest in duplicate for each flight. Copies of the completed manifests must be kept for 30 days at the operator's principal base or at another location used by the operator and approved by the certificate-holding district office (CHDO).

**NOTE:** FAR 135.79 requires an operator to develop procedures for locating flights that do not operate on FAA flightplans. Flight-locating information must be retained at the operator's principal place of business or at other designated places until the flight is completed. Because of the short duration of these records, they may not be available for a trip records inspection. However, these records may be available for examination when an inspector conducts an operational control inspection.

examined as it pertains to each flight. Whatever method is used, each element of the trip records should be examined for accuracy, completeness, and compliance with procedures described in the operator's manual.

A. *FAR 121 Domestic and Flag Carriers.* During a trip records inspection, the inspector will examine the operator's load manifest, flightplan, and dispatch release.

(1) *Load Manifest.*

(a) The following weights are part of the load manifest:

- Empty aircraft
- Fuel and oil
- Cargo and baggage
- Passengers and crewmembers

(b) The maximum allowable weight for any flight must not exceed the following weights:

- Maximum weight for the runway of intended use
- Maximum weight considering fuel and oil consumption to permit compliance with en route limitations
- Maximum weight considering fuel and oil consumption to permit compliance with maximum landing weight at destination
- Maximum weight considering fuel and oil consumption to permit compliance

(e) All passenger names must be listed unless another acceptable means of accountability is used by the operator.

(f) The load manifest must be signed by the following persons, as applicable:

- Operator employees who have supervision duty over aircraft loading
- Other qualified persons authorized by the operator

(2) *Dispatch Release.* The flight's pilot-in-command (PIC) and aircraft dispatcher must sign the dispatch release. A computerized signature may be used by the dispatcher according to an approved dispatching system. The dispatch release must contain the following items:

(a) The aircraft's identification number and trip number must be listed.

(b) All possible airports to be used on the flight must be listed:

- Departure airport
- Intermediate stops
- Destination and alternate airports

(c) The proposed type of operation (IFR or VFR) must be listed.

(d) The minimum fuel supply must be listed.

(e) The dispatch release must include, or have attached to it, the latest weather reports and forecasts, or

(ETOPS) or for operation in minimum navigation performance specification (MNPS) airspace that also function as flight logs should be retained as part of the trip records for the required period.

*B. Part 121 Supplemental Carriers and Commercial Operators.*

(1) *Load Manifest.* The information required is the same as for domestic and flag operators.

(2) *Flight Release.* The flight release must be signed by the PIC and contain the following items:

(a) The company or organization name must be listed.

(b) The make, model and registration number of the aircraft must be listed.

(c) The flight or trip number and date of the proposed flight must be listed.

(d) Crewmember names, including flight attendants and the pilot designated as PIC, must be listed.

(e) All possible airports to be used and the route to be flown must be listed.

- Departure airport
- Destination and alternate airports

(f) The minimum fuel supply must be listed.

(g) The type of operation to be used (IFR or VFR) must be listed.

(h) The flight release must contain, or have attached to it, the latest weather reports and forecasts, or

(4) *Copy of Flightplan.* The operator can meet this requirement by keeping a copy of the computer flightplan that is submitted to air traffic control. Flightplans are not required to identify every fix on the route of flight. Computerized flightplans that also function as flight logs for ETOPS or for operation in MNPS airspace should be retained as part of the trip records for the required period.

(5) *Pilot Route Certification.* The flight release must contain documentation that the PIC has met the qualification requirements of FAR 121.443 and FAR 121.445.

*C. FAR 135 Air Taxi Operators.* The trip records inspection for Part 135 air taxi operators requires that the inspector examine the load manifest to determine accuracy and compliance with procedures described in the operator's manual. Load manifests are required only for multiengine aircraft and must be signed by an authorized individual to verify the accuracy of the information. Load manifests must contain the following information:

(1) *Number of Passengers.* The total number of passengers must be listed.

(2) *Weight of Loaded Aircraft.* The total weight of the loaded aircraft must be listed.

(3) *Maximum Allowable Takeoff Weight for the Flight.* The maximum allowable takeoff weight for a flight that meets the multiple limitations of Subpart I of Part 135 must not exceed the maximum allowable landing weight plus en route fuel burn.

(4) *CG Limits and CG Location.* If the CG is calculated, then its location must be indicated. If the aircraft is loaded according to a loading schedule or other approved method, an entry must be made on the manifest indicating that the CG is within limits.



Section 1. ACCIDENT INVESTIGATIONS (PTRS CODE 1702 OR 1703)

1. General .....	7-1
3. Accident Investigation Division, AAI-1 .....	7-1
5. Legal Basis For Investigations .....	7-2
7. FAA Investigations .....	7-2
9. Principal Inspector Notification and Involvement .....	7-3
11. Accident Notification .....	7-3
13. Inspector Functions .....	7-3
15. Aircraft Accident Report .....	7-4
17. PTRS Input .....	7-4
18.-28. Reserved .....	7-4

Section 2. INCIDENT INVESTIGATIONS (PTRS CODE 1711 OR 1712)  
AND OCCURRENCES (PTRS CODE 1725)

29. General .....	7-13
31. Definitions .....	7-13
33. Responsibilities .....	7-13
35. Notification .....	7-13
37. Reports (TBD)* .....	7-14
39. PTRS Input .....	7-14
40.-50. Reserved .....	7-14

\*(TBD) = TO BE DEVELOPED



## SECTION 1. ACCIDENT INVESTIGATIONS (PTRS CODE 1702 OR 1703)

**1. GENERAL.** This chapter contains information and guidance to be used by operations inspectors when involved with the investigation and reporting of operator accidents. This chapter supplements current FAA Order 8020.11, "Aircraft Accident and Incident Notification, Investigation, and Reporting," highlighting significant areas of FAA functions in the investigation of operator accidents. Although similar investigative techniques are used in all aircraft accident investigations, the role of the operations inspector, the level of FAA involvement, and the reporting procedures are different in air transportation investigations.

**A. NTSB Responsibility.** The National Transportation Safety Board (NTSB) is responsible for the investigation of all aircraft accidents and for the determination of the probable cause of those accidents. The NTSB does not have adequate personnel to investigate all aircraft accidents; therefore, the NTSB may delegate to the FAA the authority to partially or fully investigate an accident. For those investigations conducted jointly by the NTSB and the FAA, the NTSB appoints an investigator-in-charge (NTSB IIC) for every accident.

**B. FAA Responsibility.** The FAA is responsible for the investigation of all accidents, and must determine the facts surrounding any accident and whether any aircraft operator involved in an accident was in compliance with the regulations. For every accident which is jointly investigated, the FAA appoints an investigator-in-charge (FAA IIC) to assist the NTSB IIC and to determine the level of FAA involvement. During an accident investigation, the FAA retains authority for investigating regulatory compliance. Through signed agreements, the NTSB has agreed to keep the FAA IIC informed of all aspects of the investigation, and to make pertinent investigation records

**Par. 1**

and reports available in a timely and orderly manner. FAA Order 8020.11 prescribes the necessary process and procedures to meet this statutory requirement.

**NOTE:** Inspectors are expected to be familiar with the current FAA Order 8020.11 and to have completed Part One of Aircraft Accident Investigation training before acting as an FAA IIC during accident investigations.

**C. Other Parties.** In addition to the involvement of the NTSB and the FAA, other parties may participate in the investigation of an accident. Company safety personnel, manufacturing representatives, union representatives, and others may be on site to assist in the investigation. It is important that all personnel involved with the accident investigation be aware of the other parties and their teams in order to establish communication channels for obtaining and exchanging information.

**NOTE:** When a geographic inspector is placed on an investigation team, local operator contacts and established means of communication may be limited due to the operator involvement and the establishment of formal means to communicate and obtain information concerning the accident.

**3. ACCIDENT INVESTIGATION DIVISION, AAI-1.** The manager of the Accident Investigation Division, AAI-1, has the overall responsibility to develop FAA policy and procedural instructions for accident investigation and reporting.

**A. Notification and Coordination Procedures.** Headquarters is notified through the command centers of an accident. AAI-1 determines whether the accident is to be investigated by AAI-100 or regional flight standards division (RFSD) personnel. Once the decision had been made to send

**7-1**

the FAA. This investigator will accompany the NTSB "Go-Team." AAI-1 is responsible for designating the FAA IIC and for determining which accidents will be investigated by AAI-100.

**5. LEGAL BASIS FOR INVESTIGATIONS.** Title VII of the Federal Aviation Act provides for FAA participation, as appropriate, in aircraft accident investigations conducted by the NTSB. Sections 313(a) and 601(b), as amended, contain the two general responsibilities of the FAA pertinent to aircraft accidents and incidents. These responsibilities are as follows:

- To ensure that all facts and circumstances leading to the accident are recorded and evaluated, and that action is taken to prevent similar accidents
- To promulgate and enforce the FAR's for certifying civil aircraft airworthiness, for certifying airmen and operators, for certifying airports used by operators utilizing aircraft with more than 30 passenger seats, and for ensuring compliance with certain safety standards

**7. FAA INVESTIGATIONS.** Depending on the occurrence, accident investigation may involve local resources, one or more RFSD's, or participation from headquarters divisions other than Flight Standards Service, including Security, Airway Facilities, Air Traffic, Aviation Medicine, Chief Counsel, Aircraft Certification, Public Affairs, or International Aviation. The responsibility for coordinating the level of FAA involvement rests with the FAA IIC.

**A. Nine Responsibilities of the FAA.** FAA Order 8020.11 lists nine specific responsibilities in all accident investigations conducted by the FAA. The FAA investigations must determine whether or not the following were a factor in the accident:

- The performance of FAA facilities or functions

- The Federal Aviation Regulations (FAR's) were adequate
- The airport certification safety standards or operations were involved
- The operator/airport security standards or operations were involved
- The airman medical qualifications were involved
- There was a violation of the FAR's

**B. Parallel Investigation.** The preferred method of conducting a concurrent and parallel investigation with the NTSB is for Flight Standards Service to assign another inspector other than the FAA IIC to conduct the FAA investigation. If manpower resources do not permit another FAA inspector to conduct a separate investigation, however, then the FAA IIC will both assist the NTSB and represent the FAA.

**NOTE:** No enforcement action should be initiated by the FAA until the NTSB has completed the field investigation. Exceptions can be made in the interest of safety, such as an emergency revocation of a certificate. If any action is taken, it must be coordinated with the NTSB IIC and the RFSD's.

(1) Because of the differences in the responsibilities of the NTSB (to determine probable cause) and the FAA (to enforce compliance with regulations), administrative law rules of evidence do not allow evidence obtained by the FAA under direction of the NTSB IIC to be used by the FAA against a defendant in legal enforcement proceedings.

(2) It is important to note that, in conducting these investigations, there will be times when the flight standards district office (FSDO) needs additional information not required by the NTSB. For example, if, as the result of an



(3) When FAA inspectors collect evidence for use against an airman or operator, there must be no question in the mind of the person from whom the evidence is being requested that the inspector is not working under the direction of the NTSB. For example, witness or crew-member statements should never be written on NTSB forms. The rules of evidence do not, however, prohibit FAA inspectors and NTSB investigators from gathering information simultaneously, such as when interviewing a witness, as long as the witness is aware that the information is being given to both the NTSB and to the FAA separately.

**9. PRINCIPAL INSPECTOR NOTIFICATION AND INVOLVEMENT.** Principal operations, maintenance, and avionics inspectors assigned to an operator involved in an accident must be available to the FAA IIC as soon as possible after notification of the accident. The FAA IIC is responsible for determining the extent of the principal inspector involvement with the investigation. This decision shall be made by the FAA IIC after consulting with the principal inspector, the district office manager, and/or the appropriate flight standards division manager.

**NOTE:** The FAA IIC should avoid using a principal inspector for investigations involving that inspector's assigned operators, if possible.

**11. ACCIDENT NOTIFICATION.** Normally, a FSDO is made aware of aircraft accidents through the regional operations center (ROC), however, an FAA employee who becomes aware of an accident through other means shall report the accident to the nearest air traffic facility (such as an air route traffic control center, an airport, a terminal facility, or a flight service station). This facility shall initiate FAA Form 8020-9, "Aircraft Accident/Incident Preliminary Notice" (see Appendix 3 of FAA Order 8020-11) and shall make the appropriate notifications, including one to the local ROC. The ROC shall notify the FSDO having geographic jurisdiction over the area of the

8020-9)

- Determine if the accident involves an operator
- Request that the ATC statements and voice tapes be prepared and sent to the FSDO

**13. INSPECTOR FUNCTIONS.** After being notified by the ROC of an accident, the FSDO in the geographic area of responsibility shall designate an inspector as the FAA IIC. The inspector may be acting in different roles and performing different functions during the course of an operator accident investigation. The inspector is usually at the scene of the accident prior to the arrival of either the NTSB or AAI-100 and should follow the guidelines in chapter 4, section 3 of current FAA Order 8020.11.

(1) *FAA IIC.* Until relieved by the NTSB or an AAI-100 specialist, the FSDO inspector shall act as the FAA IIC. The FAA IIC is normally either an aviation safety inspector (ASI) or an AAI-100 specialist assigned to supervise and coordinate all FAA participation in an accident or incident investigation conducted by the NTSB or the military services. The FAA IIC is responsible for the following:

- Assembling the team of technical specialists to conduct the investigation
- Managing all FAA resources at the scene
- Determining if FAA responsibilities were involved in the occurrence

(2) *FAA Coordinator.* This job title is used by the NTSB and the military services when referring to the FAA IIC.

(3) *FAA Participants.* FAA Participants consist of FAA personnel assigned to assist the FAA IIC and the NTSB IIC. The FAA participants report to the FAA IIC

ions), and completes FAA Form 8020-10 (see Appendix 2 of FAA Order 8202.11). The completed package must then be sent to at least the following offices:

- The flight standards division in the region of the occurrence
- The operator's certificate holding district office (CHDO)
- The aircraft certification directorate responsible for the aircraft type involved
- The Accident Investigation Division, AAI-200
- The Operational Systems Branch, AVN-120

**NOTE: If obtained by the FAA IIC, autopsy reports are sent (unfolded) to the NTSB IIC in an envelope marked "FOR OFFICIAL USE ONLY." These reports should be kept in a separate envelope in the office accident file.**

**17. PTRS INPUT.** The Program Tracking and Reporting Subsystem (PTRS) will be used to track FAA-conducted investigations and the activities of FAA inspectors during the course of NTSB accident investigations. Either activity code 1702 or 1703 will be used to track FAA IIC assistance, and NTSB activity code 1761 (Technical Support Function) will be used by FAA participants.

record their activities. This PTRS record must be closed with a "C." Do not use an "A" to close this report.

**NOTE: The tracking field on the PTRS data sheet, for the inspectors providing technical support, will contain the activity code 1702 or 1703 to link the activity to the investigation.**

**B. FAA-Conducted Investigations.** The inspector (FAA IIC) or FSDO inspector conducting the FAA investigation will open a PTRS record with activity code 1702 (Accidents On-Site). During the course of the investigation, the PTRS record should remain open and the inspector should use Section IV (Comments) to log activities until the investigation has been concluded and the Enforcement Investigation Report has been forwarded to the region. After the investigation has been concluded, the inspector shall close the PTRS record with a "C."

(1) FAA participants providing investigative support at the accident site, will use activity code 1761 (Technical Support Functions) to record their activities. This PTRS record must be closed with a "C" at the conclusion of the support activity.

(2) FAA participants providing investigative support not at the accident site will use activity code 1703 (Accidents - Other) to record their activities. This PTRS record must be closed with a "C." Activity code 1702 must be used in the tracking field to connect the activity to the investigation.

**18. - 28. RESERVED.**

**[PAGES 7-5 THROUGH 7-12 RESERVED]**

**31. DEFINITIONS.** Inspectors involved with the investigation of an incident or occurrence should have a clear understanding of the definitions that follow. FAA Order 8020.11 contains the following definition for an incident which is repeated here only for clarification and convenience. Inspectors should refer to chapter 6 of Order 8020.11 to review the investigative and reporting procedures for incident investigations. Inspectors should be aware that Flight Standards Service (FSS) also uses the term "occurrence" to label an event that is investigated.

*A. Incident (PTRS Code 1711 or 1712).* An incident is defined as "an occurrence involving one or more aircraft in which a hazard or a potential hazard to safety is involved but not classified as an accident due to the degree of injury and/or extent of damage." An incident could affect the safety of operations. This definition covers a broad range of events and may include the following:

- Damage to an aircraft (other than an accident)
- Runway incursion
- Pilot deviation
- Near mid-air collision (NMAC)

**NOTE:** FAA Order 8020.11 identifies an NMAC as an incident. This incident should be investigated using the procedures in chapter 6, section 2 of Order 8020.11. When recording the work activities involved with an NMAC investigation, inspectors should use PTRS code 1720.

*B. Occurrence (PTRS Code 1725).* An occurrence is defined as an event that is not readily discernable as an incident. Events, such as a low-speed abort or a turnback

Not all events that are brought to the attention of FSS have an obvious impact on the safety of operations, nor are they readily identifiable as an incident. Until an event can be identified as an incident, it should be regarded as an occurrence. The advantage of labeling an event as an occurrence is that it allows for an investigation of the facts for an accurate identification of the event without generating unnecessary reports.

**NOTE:** Safety improvement recommendations may result from either incident or occurrence investigations.

**33. RESPONSIBILITIES.** Regional flight standards division (RFSD) managers are responsible for investigating incidents occurring within their jurisdiction. This responsibility is usually delegated to the local flight standards district office (FSDO). If an incident occurs in one regional geographic area, but the aircraft lands in another, the region in which the aircraft first landed is responsible for conducting the investigation.

**NOTE:** Runway incursion, pilot deviations, and NMAC's are always investigated by the region of occurrence, regardless of where the aircraft lands.

**35. NOTIFICATION.** FSDO's normally receive incident notification from either their regional operations center (ROC) or an air traffic (AT) facility. If the inspector observes or receives notification of an incident, including NMAC's, from a source other than an AT facility, and the incident is not known by the AT facility, the inspector shall immediately notify the nearest AT facility and provide the information that the facility needs to complete its notifications. The inspector may facilitate the notification process in this instance by contacting the ROC.

*FYI: FAA Form 8020-11, "Incident Report - Eight Part Set" is no longer used for pilot deviations, and FAA Form 3556, "Near Mid-Air Collision Preliminary Report" is no longer used for NMAC reports.*

Subsystem (PTRS) will be used to track the work activities of FAA inspectors during the investigations of occurrences and incidents, including NMAC's.

A. *Occurrence Investigation (PTRS Code 1725)*. Most events that are "called in" to a FSDO can be initially regarded as occurrences. The PTRS offers the FAA supervisor a useful tool to record and track occurrences to a conclusion. Any event that is identified as an operations-related occurrence should be assigned to an inspector as an "open" item and entered into the PTRS using the activity code 1725, with appropriate comments in Section IV. Once a record of the occurrence has been established, it should be left open until the investigation is concluded. The supervisor can use these opened records to balance work activities and to track the progress of the investigation through the Open Items Report.

(1) When an occurrence investigation is concluded, and no further action is required, the inspector shall close the PTRS record with a "C," with the appropriate comments in Section IV supporting the conclusion.

(2) When an occurrence investigation is concluded, and the results indicate that the event is actually an incident the inspector shall close the existing PTRS record

event is clearly identifiable as an incident, inspectors may enter it into the PTRS directly by either using activity code 1711 for incidents that will require on-site investigations or activity code 1712 for incidents that will not require on-site investigations.

(1) When an incident investigation is concluded, and no further action is required, the inspector shall close the PTRS record with a "C," with the appropriate comments in Section IV supporting the conclusion.

(2) When an incident investigation is concluded, and the results indicate that the event is actually an accident, the inspector shall close the record with a "C" in the results field, with the appropriate comments in Section IV. The inspector shall open a new record ID for the accident investigation under activity code 1702 or 1703 in the activity field. Activity code 1711 or 1712 should be placed in the tracking field to show that the accident investigation is the result of an incident.

**NOTE: If the incident results in an enforcement action, the inspector must place the locally generated EIR number in the investigative field.**

40. - 50. RESERVED.

[PAGES 7-15 THROUGH 7-26 RESERVED]

## CHAPTER 2. REGIONAL TECHNICAL FUNCTIONS

### Section 1. REGIONAL FLIGHT PROCEDURES BRANCHES

91. General	8-25
93. Standard Instrument Approach Procedures (SIAP's)	8-25
95. Special Terminal Instrument Procedures	8-25
97. Military Procedures	8-26
99. Standard Operations Specifications	8-26
101. Obstruction Evaluation	8-26
103. Airport Airspace Analysis	8-26
105. Noise Abatement	8-27
107. Off-Airway Routes	8-27
109. Air Navigation Facilities	8-27
111. Non-Federal Navigation Aids	8-28
112.-114. Reserved	8-28

### Section 2. EVALUATION STAFFS (TBD)\*

115.-194. Reserved	8-35
--------------------	------

## CHAPTER 3. TECHNICAL GROUPS, BOARDS, AND NATIONAL RESOURCES

### Section 1. BACKGROUND INFORMATION

195. Chapter Contents	8-77
197. Background Information and Definitions	8-77
198.-210. Reserved	8-78

\*(TBD) = TO BE DEVELOPED

217. Boards Conducted by the AEG .....	8-92
219. Duties of the AEG Operations Specialists .....	8-92
221. POI Assigned to a Specific Manufacturer (Reserved) .....	8-92
223. Locations .....	8-92
224.-234. Reserved .....	8-92

### Section 3. FLIGHT OPERATIONS EVALUATION BOARDS (FOEB's)

235. General .....	8-101
237. Responsibilities of the FOEB .....	8-101
239. Composition of an FOEB .....	8-101
241. Responsibilities of FOEB Members .....	8-101
243. Master Minimum Equipment List (MMEL) Development .....	8-101
244.-254. Reserved .....	8-102

### Section 4. FLIGHT STANDARDIZATION BOARDS (FSB's)

255. General .....	8-111
257. Establishment of an FSB .....	8-111
259. Composition of an FSB .....	8-111
261. Responsibilities of the FSB .....	8-111
263. Responsibilities of FSB Members .....	8-111
265. FSB Report .....	8-112
267. Training Requirements for Follow-on Aircraft .....	8-112
269. Use of Simulators or Training Devices .....	8-112
270.-280. Reserved .....	8-112

### Section 5. MAINTENANCE REVIEW BOARDS (MRB's)

281. General .....	8-121
283. Background .....	8-121







[PAGES 8-36 THROUGH 8-76 RESERVED]



function of aircraft evaluation groups (AEG's) and the boards managed by AEG's. It also contains guidance, direction, and information to be used by inspectors concerning existing and newly certified aircraft. This chapter addresses inspector duties when serving as board members or technical advisors to a board managed by an AEG. This chapter is structured as follows:

(a) Section 1 contains background information and definitions of AEG boards and certain technical terms that may be useful to inspectors when using sections 2 through 5.

(b) Section 2 contains guidance for inspectors on the services available from an AEG and a listing of AEG locations.

(c) Section 3 contains descriptions of the purpose, composition, and responsibilities of flight operations evaluation boards (FOEB's) and a brief explanation of the minimum equipment list (MEL) approval process from the master minimum equipment list (MMEL).

(d) Section 4 contains a description of the purpose, composition, and responsibilities of flight standardization boards (FSB's) and a description of the general process used to determine pilot type ratings and recommended minimum training program requirements.

(e) Section 5 contains general information for inspectors on the purpose and function of maintenance review boards (MRB's).

**197. BACKGROUND INFORMATION AND DEFINITIONS.** Background information is contained in the definitions of the following terms, which are used throughout this chapter.

**A. Aircraft Certification Directorates.** The formation of aircraft certification directorates in the New England, Central, Southwest, and Northwest Mountain regions was

standardize the application of airworthiness standards. An aircraft certification directorate has general responsibilities for the initial certification of aircraft, for accepting any significant changes to existing aircraft, for establishing the airworthiness standards of aircraft in operation, and for developing airworthiness directives (AD's) as required.

**B. Aircraft Certification Offices (ACO's).** Aircraft certification offices (ACO's) perform aircraft certification duties under the guidance of an aircraft certification directorate. ACO's administer most type certification and continuing airworthiness program activities. ACO's also establish standards and procedures and recommend regulations governing the type design and certification of aircraft, engines, and propellers. ACO's administer follow-on activities related to certification such as the evaluation and issuance of supplemental type certificates (STC's) and the issuance of AD's. They may provide expert technical support for aircraft accident/incident investigation and for service difficulties. An ACO often works directly with manufacturers and is normally located in a region that contains one or more aircraft or engine manufacturers.

**C. Aircraft Evaluation Groups (AEG's).** Aircraft evaluation groups (AEG's) are units of the Flight Standards Service (FSS) and are usually collocated with and work closely with ACO's. An AEG provides initial operational evaluation of aircraft for FSS approval in the aircraft certification process. Following the certification and evaluation of an aircraft, the AEG is involved in monitoring the fleet service experience to help maintain continued airworthiness.

**D. Flight Operation Evaluation Boards (FOEB's).** Flight operation evaluation boards (FOEB's) are made up of technically qualified specialists, engineering representatives, and aviation safety inspectors (ASI's). FOEB's are responsible for developing master minimum equipment lists (MMEL's) from proposed master minimum equipment lists (PMEL's) provided by the aircraft manufacturer. These

crewmembers, and for establishing pilot type rating requirements for new aircraft and variants of each aircraft type. FSB's also develop recommended minimum training requirements used for flight crewmember qualification.

F. *Maintenance Review Boards (MRB's)*. Maintenance review boards (MRB's) are responsible for the development of FAA maintenance requirements for a new aircraft type. An MRB approves the initial maintenance and inspection requirements for new, large turbojet aircraft to be used in air transportation.

G. *Make/Model/Series/Variant*. The meaning of these terms may be seen in the example of a Boeing 727-231, where Boeing is the make, 727 is the model, 200 is the series, and 31 is the variant.

H. *Type*. The following descriptions of "type ratings" and "type certificates" are an amplification of the definitions found in FAR 1.1.

(1) *Type Ratings*. A pilot type rating is an endorsement on a pilot certificate. It is an authorization to serve as pilot-in-command (PIC) of a large (over 12,500 pounds GTOW) aircraft, a turbojet aircraft, or other aircraft when determined necessary by the Administrator. These type ratings may be a single aircraft type (such as the BA-3100), or may include a group of two or more aircraft types (B-757/767), or may include only one of a group of similar aircraft types (B-747-400). The holder of a Boeing 757/767

aircraft that are similar in design produced under a single type certificate issued, according to Part 21, Subpart B. Each aircraft type must have a type certificate before it can be used in air transportation. As in previous examples, the Boeing 757 would be built under a different aircraft type certificate than the Boeing 767, even though each may be flown under the same pilot type rating. Conversely, the Boeing 747 models are built under the same type certificate, even though two unique type ratings are required. Aircraft type determinations are established by an ACO.

I. *New Aircraft*. A new aircraft is an aircraft that has been certified under a new type certificate.

J. *Follow-on Aircraft*. Follow-on aircraft are aircraft that are certified under an amendment to an existing type certificate. An operator may have a follow-on aircraft certified without having to repeat all of the flight tests required for original certification. Examples of follow-on aircraft include the Boeing 747-400 aircraft.

*FYT: Discussions of base aircraft, variant aircraft, and differences training are contained in volume 3, chapter 2, section 9 of this handbook. Inspectors should refer to volume 3, chapter 2 of this handbook before approving an operator's training program, and to volume 4, chapter 4, section 3 before approving an operator's MEL.*

198. - 210. RESERVED.

[PAGES 8-79 THROUGH 8-90 RESERVED]

(FSS), an AEG serves as a liaison with the Aircraft Certification Office (ACO) which begins during the initial certification of an aircraft and continues throughout the service life of the aircraft. In addition, the AEG is responsible for providing guidance to flight standards field offices on flight crewmember qualification requirements, requirements for dispatching aircraft with equipment inoperative, and for required operational and maintenance procedures for such a dispatch.

**A. AEG Inspector Role.** AEG specialists are fully qualified FSS aviation safety inspectors (ASI's) for either the operations, airworthiness, or avionics specialties, with extensive experience in their fields. These inspectors work directly with the ACO during the certification process. An AEG is responsible for providing technical expertise during certification activities to ensure that an aircraft design may be operated in compliance with the Federal Aviation Regulations (FAR's). The AEG inspectors advise manufacturers during the design and certification process of operational requirements, minimum flightcrew complement, recommended flight crewmember training, and other procedural requirements. The inspectors participate in engineering activities by evaluating items such as flight characteristic differences from the base aircraft, the operational impact of new aircraft equipment, and proposed master minimum equipment list (PMMEL) items.

**B. AEG Liaison Role.** An AEG serves as a liaison between FSS and the ACO. For example, if an operator requests a procedure which changes the airplane's takeoff performance, the AEG acts as liaison between the principal operations inspector (POI) and the ACO.

**213. AEG RESPONSIBILITIES.** An AEG has a variety of responsibilities, which include the following:

- Providing operational input to FAA engineering offices and to the manufacturer during the aircraft design and type certification process

member training, checking, and currency requirements

- Establishing pilot type rating needs and requirements
- Participating in crew complement determinations
- Establishing special training requirements (such as dutch roll training in a B-727)
- Developing and revising master minimum equipment lists (MMEL's)
- Developing maintenance program requirements and reviewing maintenance programs to determine whether there are adequate instructions for the procedures being used
- Providing operational guidance for airworthiness directives (AD's), service difficulty reports (SDR's), and supplemental type certificates (STC's)
- Convening and providing a chairperson to flight standardization boards (FSB's), flight operations evaluation boards (FOEB's), and maintenance review boards (MRB's)
- Conducting initial flight checks of Flight Standards operations inspectors, the aircraft manufacturer's initial pilot cadre, initial operator pilots, and FAA engineering flight test pilots, if necessary, for a new aircraft type
- Coordinating with the National Simulator Team on the evaluation of data packages for simulator acceptance

**215. ACCIDENT OR INCIDENT INVESTIGATION SUPPORT.** When accidents or incidents involving AEG-assigned aircraft occur, investigating flight standards district offices

FOEB's, FSB's, and MRB's. Operations inspectors may be invited to participate as members of the FOEB and the FSB. Membership on MRB's, however, is restricted to airworthiness and avionics inspectors.

**219. DUTIES OF THE AEG OPERATIONS SPECIALISTS.** The duties of an AEG operations specialist vary according to the complexity of the aircraft and the regulations under which the aircraft is certified. They work directly with ACO personnel to provide operational guidance during the certification process. Participation in engineering test flights allows these inspectors to become familiar with the aircraft.

**221. POI ASSIGNED TO A SPECIFIC MANUFACTURER. (RESERVED)**

**223. LOCATIONS.** The locations of AEG's are as follows:

*C. New England Region, ANE-270, Burlington, Massachusetts.* ANE-270 is responsible for aircraft engines and propellers certified under Part 33 and Part 35.

*D. FSS Field Offices.* FSS has two field offices responsible for all transport category airplanes. These offices report to AFS-2. One is located in Seattle, Washington (ANM-270S), and one in Long Beach, California (ANM-270L). These offices are responsible for transport category airplanes certified under Part 25, and for all large airplanes certified under CAR 4b. The Northwest Mountain Region, ANM-270, provides support staff for this function.

**NOTE:** FAA certification of foreign-built aircraft is handled by the AEG responsible for that particular aircraft (for example, ASW-270 for foreign-built helicopters).

**224. - 234. RESERVED.**

**[PAGES 8-93 THROUGH 8-100 RESERVED]**

guidance for operations inspectors who may be invited to serve as members of an FOEB.

**237. RESPONSIBILITIES OF THE FOEB.** An FOEB is established through its assigned aircraft evaluation group (AEG) as discussed in volume 8, chapter 3, section 2. The primary tasks of an FOEB are the development and revision of master minimum equipment lists (MMEL's). The FOEB also has responsibility for coordinating with organizations such as aircraft certification offices (ACO's), aircraft and engine manufacturers, operators, and private sector groups such as the Air Transport Association of America (ATA), the Regional Airline Association (RAA), and the Air Line Pilot Association (ALPA). An FOEB is responsible for coordinating with both the ACO and the aircraft manufacturer to develop an MMEL prior to the certification of an aircraft. An FOEB is also responsible for sending a copy of meeting minutes, the proposed MMEL, and any subsequent revisions, to AFS-200 for review and coordination by the AEG manager prior to approval.

**239. COMPOSITION OF AN FOEB.** An FOEB is usually comprised of a chairperson from an AEG, flight standards field office aviation safety inspectors, and ACO engineering personnel, as follows.

A. *Chairperson.* The FOEB chairperson is an AEG operations specialist who is normally the chairman of the applicable flight standardization board (FSB).

B. *FOEB Members.* Usually, members of the FOEB are selected from the following specialties:

- An operations inspector
- An engineering representative, normally a flight test pilot

- A representative from the headquarters Flight Standards Service (FSS), if available

**241. RESPONSIBILITIES OF FOEB MEMBERS.** The FOEB chairman, members, and other participants have the following responsibilities.

A. *FOEB Chairperson.* The chairperson's primary tasks are to plan board functions, serve as a board member, and to prepare the meeting agenda. The chairperson also prepares minutes of each meeting.

B. *FOEB Members.* Members review documents, contribute technical expertise, and respond to private sector comments and questions. Members participate in all meetings, as requested by the chairperson.

C. *Other Participants.* When invited by the chairperson, private sector participants (primarily manufacturers, operators, vendors, and representatives from other groups such as ATA, ALPA, and RAA) may attend and provide information at FOEB meetings. The chairperson may also invite other FAA personnel to attend.

**243. MASTER MINIMUM EQUIPMENT LIST (MMEL) DEVELOPMENT.** The process of MMEL development is described in detail in volume 4, chapter 4, section 2 of this handbook (TBD). Within this process, the FOEB has the following responsibilities for the initial MMEL development and MMEL revisions.

A. *Meetings with the Private Sector.* The MMEL is developed during meetings between the FOEB, private sector groups, and other FAA participants. At these meetings there are opportunities for all participants to comment on specific items, using the proposed master minimum equipment list (PMEL) as a worksheet. Items

MMEL may be initiated by an operator. Requests for revisions to the MMEL are submitted with maintenance and operations procedures (O and M procedures) and engineering data to substantiate the requested change,

also be submitted directly to the FOEB chairman by foreign operators and organizations such as ATA and ALPA.

**244. - 254. RESERVED.**

**[PAGES 8-103 THROUGH 8-110 RESERVED]**



**257. ESTABLISHMENT OF AN FSB.** An aircraft evaluation group (AEG) decides when to establish an FSB. FSB's are usually established for large turbojet and turbopropeller aircraft, SFAR 41 airplanes, and Part 23 commuter category airplanes. FSB's are not usually established for Part 23 and Part 27 aircraft, unless the aircraft has unique design, flight, or handling characteristics.

**259. COMPOSITION OF AN FSB.** An FSB is usually composed of a chairperson from an AEG, flight standards operations inspectors, a Washington Headquarters representative, and various technical advisors, as follows:

A. *Chairperson.* The chairperson is usually an AEG operations specialist assigned to the aircraft certification project.

B. *Operations Inspectors.* FSB members are usually operations inspectors who will be involved with the initial operational approval of the aircraft.

C. *Washington Headquarters Representative.* FSB membership may also include a representative from Washington Headquarters (AFS-200, AFS-400, or AFS-800) as appropriate. This Headquarters representative helps ensure that FAA policy is considered by the FSB.

D. *Technical Advisors.* At the discretion of the chairperson, technical advisors from other AEG boards may be invited to attend.

**261. RESPONSIBILITIES OF THE FSB.** The FSB's primary responsibilities are to determine the requirements for pilot type ratings, to develop minimum training recommendations, and to ensure initial flight crewmember competency in accordance with AC 120.53, "Crew Qualification and Pilot Type Rating Requirements for Transport

Analysis System (ASAS) data base. Specific functions of the FSB are as follows:

(1) *Determination of Pilot Type Ratings.* The FSB determines the requirement for a pilot type rating for new aircraft usually during certification flight tests. The FSB also evaluates differences in follow-on aircraft to determine if a new pilot type rating is required.

(2) *Development of Training Objectives.* The FSB develops training objectives for normal and emergency procedures and maneuvers and reviews training device requirements.

(3) *Training Recommendations.* The FSB publishes recommendations for use by POI's during approval of an operator's training program. In developing training objectives and procedures, the FSB considers unique requirements of an aircraft such as the fly-by-wire electronic flight control system and the side-stick controller of the Airbus 320.

(4) *Initial Training/Checking.* Board members usually conduct initial training and checking of the manufacturer's pilots and FAA operations inspectors.

(5) *Review of Existing Training Programs.* When required, the FSB may review training programs for existing aircraft to evaluate the effectiveness of the training.

(6) *Accidents.* In case of an accident, FSB members may be consulted on training or crewmember competency issues involving aircraft assigned to the board.

**263. RESPONSIBILITIES OF FSB MEMBERS.** The FSB chairperson and members have the following responsibilities.

A. *FSB Chairperson.* The chairperson is required to attend the pre-type certification board meeting, and is

are available to FAA field offices. The FSB report should contain the recommended minimum training requirements which operations inspectors may use when evaluating operator training programs.

A. *Report Considerations.* FSB reports are based on a variety of factors, including private sector comments, flight test evaluation, and operating experience.

B. *Final Determinations and Findings.* The FSB may hold public meetings and invite private sector groups to attend, after which the FSB will make a final determination and issue recommendations.

C. *Contents of the FSB Report.* The FSB report should contain the following:

- The assignment of type ratings
- A recommendation of minimum training, checking, and currency requirements
- Any special training requirements

requirements for follow-on aircraft, the FSB requests a revised training program from the manufacturer and evaluates differences between the base aircraft and its variant based on factors such as design and operational or procedural differences. Advancements in technology that affect flight deck automation and aircraft systems are also considered. In addition, the FSB may collect and review background materials such as the original training programs and the aircraft's operating history, including accidents or incidents. If the FSB determines that additional training is required for the follow-on aircraft, the operator shall usually modify training programs for the base aircraft and establish a differences training program to address the variant aircraft.

#### **269. USE OF SIMULATORS OR TRAINING DEVICES.**

When new equipment is installed on the aircraft, simulators or training devices should be updated to reflect the correct configuration. The FSB, with coordination from the National Simulator Team, shall determine whether training devices are adequate for meeting regulatory and training requirements.

**270. - 280. RESERVED.**

**[PAGES 8-113 THROUGH 8-120 RESERVED]**

MRB's. For a more detailed discussion, inspectors should refer to FAA Order 8300.10, Airworthiness Inspector's Handbook.

**283. BACKGROUND.** The MRB process was developed as a result of the introduction of wide-bodied aircraft (for example, the Douglas DC-10, the Lockheed L-1011, and the Boeing 747). The increasing complexity of these aircraft required that a methodical assessment be made of the individual aircraft maintenance requirements to assure the highest level of aircraft safety and reliability. The FAA and aircraft manufacturers jointly formulate initial maintenance and inspection requirements for newly certified aircraft and powerplants. The FAA and manufacturers have developed a method of decision logic that establishes more efficient scheduled maintenance programs for these new aircraft.

**285. FUNCTIONS OF AN MRB.** An MRB performs the following functions:

- Prepares MRB reports and distributes them to the manufacturers after approval
- Participates in flight operations evaluation board (FOEB) proceedings

**287. COMPOSITION OF AN MRB.** An MRB is usually comprised of an aircraft evaluation group (AEG) airworthiness chairperson and airworthiness and avionics inspectors from the AEG's that have responsibility for the aircraft and engine manufacturers. The MRB chairperson shall also invite qualified airworthiness or avionics inspectors from flight standards field offices whose operators are going to use the aircraft to be MRB members. The MRB chairperson will assign these members to participate in certain industry work groups or steering committees. The MRB chairperson may also invite private sector representatives to provide technical expertise.

**288. - 300. RESERVED.**

[PAGES 8-122 THROUGH 8-130 RESERVED]



Section 1. GENERAL RESPONSIBILITIES (TBD)\*

1.-20. Reserved ..... 9-1

Section 2. PERSONAL CONDUCT (TBD)\*

21.-40. Reserved ..... 9-23

Section 3. AVIATION SAFETY INSPECTOR (ASI) CREDENTIALS

41. General ..... 9-45  
43. Types of Credentials ..... 9-45  
45. Eligibility Requirements ..... 9-45  
47. Application Procedures ..... 9-45  
49. Use of Credentials ..... 9-45  
50.-60. Reserved ..... 9-46

\*(TBD) = TO BE DEVELOPED



# **CHAPTER 1. GENERAL INSPECTOR RESPONSIBILITIES, ADMINISTRATION, AND CONDUCT**

## **SECTION 1. GENERAL RESPONSIBILITIES**

**[TO BE DEVELOPED]**

**1. - 20. RESERVED.**

**[PAGES 9-2 THROUGH 9-22 RESERVED]**





[PAGES 9-24 THROUGH 9-44 RESERVED]



performance of inspector tasks.

**43. TYPES OF CREDENTIALS.** ASI's are issued two types of credentials: (1) FAA Form 110A, (Aviation Safety Inspector Access to U.S.-Registered Aircraft), which authorizes an inspector free and uninterrupted access to the pilot's compartment of any U.S.-registered aircraft in the performance of official duties (see figure 9.1.3.1.); and (2) FAA Form 8000-39 (Aviation Safety Inspector Access to Airports), which authorizes the inspector free and uninterrupted entry into the air operations areas (secured areas) of any U.S. airport (see figure 9.1.3.2.). Both of these credentials are issued in accordance with FAA Order 8000.38, "Aviation Safety Inspector's Credential, FAA Form 110A, and Use of FAA Form 8430-13, Request for Access to Aircraft," as amended.

**45. ELIGIBILITY REQUIREMENTS.** Operations ASI's currently assigned to GS-1825 or GM-1825 positions involving air transportation inspections and surveillance are eligible to receive the FAA Form 110A credential; however, the inspector must have also completed course 21607, "Air Carrier Operations Indoctrination," or course 20702, "General Aviation Operations Indoctrination," as appropriate. To be eligible for the Form 8000-39 credential, the ASI must possess (or be concurrently issued) the FAA Form 110A credential; have fulfilled the requirements set forth in this handbook authorizing the conduct of en route inspections; and have a job function that requires the conduct of inspections.

**47. APPLICATION PROCEDURES.** Inspectors shall apply for the two credentials by completing one FAA Form 1600-14, "Application for Revised Identification or Credential Card" (see figure 9.1.3.3.) in accordance with the procedures in FAA Order 8000.38, "Aviation Safety Inspector's Credential, FAA Form 110A, and Use of FAA Form 8430-13, Request for Access to Aircraft." District

shall process the application and then retain the completed credential(s) until notified by the FAA Academy Flight Standards Branch (AAC-950) that the inspector has satisfactorily completed indoctrination training. APR-110 shall then forward the credential(s) to the appropriate flight standards division manager for issuance to the inspector.

**49. USE OF CREDENTIALS.** Although the credentials contain the general authorization for the inspector to conduct FAA work functions, specified work functions may only be performed after the inspector has been authorized by an appropriate supervisor and has satisfied the training and qualification requirements specified in this handbook. The work functions for the two credentials are as follows:

A. *FAA Form 110A Credential.* The FAA Form 110A credential contains authorization for an inspector to issue FAA Form 8430-13, "Request for Access to Aircraft," (see figure 9.1.3.4.) for access to U.S.-registered aircraft, along with a requirement that inspectors be given free and uninterrupted entry to the pilot compartment when performing official duties. These official duties include the conduct of cockpit en route inspections (see volume 6, chapter 2, section 4). An inspector who meets all training and qualification requirements, with the exception of not yet possessing an airline transport pilot (ATP) certificate with an airplane type rating, may conduct cabin en route inspections (see volume 6, chapter 2, section 3).

B. *FAA Form 8000-39 Credential.* The FAA Form 8000-39 credential contains authorization for an inspector to be given free and uninterrupted access to restricted areas at airports governed by the FAR's while the inspector is performing official duties. These official duties include those types of inspections (such as ramp inspections) that are contained in volume 6, chapter 2 of this handbook. An inspector must display this credential on an outer garment to be permitted entry airport secured areas, and while working in these

that need to be followed.

(2) *Passenger Screening Points.* Inspectors approaching passenger screening points may not bypass that screening; however, if the inspector is unable to afford the delay that may be involved in passenger screening, then arrangements should be made with the airport or operator personnel to enter the secured areas at other entry points.

(3) *Temporary Identification Cards.* When inspections are scheduled to exceed 1 day at airports outside of the inspector's geographic area of responsibility, the inspector shall attempt to obtain a temporary identification

C. *Lost or Stolen Credentials.* If either one or both of these credentials are lost, stolen, or damaged, the inspector should report the occurrence immediately to the inspector's supervisor and to the regional flight standards division (RFSD) office. When the credential is FAA Form 8000-39, the inspector should contact the security division and APR-100 to track this information. Replacement of the credentials shall be made in accordance with Order 8000.38, "Aviation Safety Inspector's Credential, FAA Form 110A, and Use of FAA Form 8430-13, Request for Access to Aircraft."

50. - 60. RESERVED.

UNITED STATES OF AMERICA  
DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
AVIATION SAFETY INSPECTOR

Whose signature and photograph appear  
on this document

Assigned to the duties of inspection, investigation and enforcement in accordance with the provisions of the Federal Aviation Act of 1958 and regulations issued thereunder. This inspector is authorized under 49 CFR 8430-13 for access to U.S. registered aircraft and is given free and uninterrupted entry to the aircraft in the performance of official duties.

Associate Administrator For Regulation and Certification

FAA Form 110A (4-89)  
SUPERSEDES PREVIOUS EDITION

INSPECTOR'S SIGNATURE

Department of Transportation  
**Federal Aviation Administration**  
**Aviation Safety Inspector**

NAME

whose signature is on the photograph hereon is  
an Aviation Safety Inspector. He must be given  
free and uninterrupted entrance to restricted areas at  
airports governed by Federal Aviation Regulations,  
in the performance of his duties.

Associate Administrator for Operations and Certification

FAA Form 8000-39 (4-89)

NAME (Last, First, MI)		<b>INSTRUCTIONS TO EMPLOYEE:</b> Type all entries. This form may be used to apply for more than one item.  <div style="border: 1px dashed black; text-align: center; padding: 20px;">           (Photo)         </div>	GRADE	SEX <input type="checkbox"/> M <input type="checkbox"/> F	DOT COMP
DATE OF BIRTH (Mo, Day, Yr)			EMPLOYEE NO		
WEIGHT			COLOR EYES		
COLOR HAIR			HEIGHT		
SOCIAL SECURITY NUMBER			DATE OF APPLICATION		
CREDENTIAL JUSTIFICATION					
SIGNATURE OF APPLICANT			AUTHORIZING OFFICIAL (Signature, Title, Routing Symbol)		

FAA Form 1600-14 (8-76)  
SUPERSEDES PREVIOUS EDITION  
AND FAA FORM 1600-45

**IDENTIFICATION CARD/CREDENTIAL APPLICATION**

APPLICATION MADE FOR -					
CREDENTIAL			ID		
AVIATION INSPECTOR		SPECIAL AGENT	LAW ENFORCEMENT		CIVIL DEFENSE
NO		NO	NO		NO
ACCIDENT INVESTIGATION			REGULAR		TEMPORARY
NO		NO	NO		NO
CIVIL RIGHTS			ARTCC/AAC		
NO		NO	NO		NO
CASS			EXECUTIVE		
NO		NO	NO		NO
DATE ISSUED		DATE RECEIVED		RECEIVED BY	

★U.S.GPO:1989-0-862-878



DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION  
**REQUEST FOR ACCESS TO AIRCRAFT**

REQUEST NO. **Nº 381451**

Pursuant to the regulations of the Federal Aviation Administration access to aircraft is requested for the person herein named on a ☐ must fly ☐ space available basis from

NAME OF OPERATOR

DATE

TIME

FLIGHT NO.

ROUTE (S)

FROM

TO

PURPOSE

**EN ROUTE INSPECTION**

INSPECTOR'S NAME-PRINT

INSPECTOR'S TITLE

HEADQUARTERS (City and State)

CREDENTIAL NO.

INSPECTOR'S SIGNATURE

FAA Form 8430-13 (1-72) SUPERSEDES FAA FORM 3689

[PAGES 9-52 THROUGH 9-58 RESERVED]

☆ U.S. GOVERNMENT PRINTING OFFICE: 1992-3 4 3 -1 2 0 / 7 5 8 0 1

